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HENDERSON'S American Farmers' Manual.

... WE this year celebrate our Golden Jubilee, the business having been established by Peter Henderson in 1847, and from a small beginning has steadily grown until to-day it is recognized as the largest all-round seed house in America, if not in the world. In no department of the business has the growth been more remarkable than in farm seeds, as offered in this Manual, and especially in grass seeds, in which we now occupy a preëminent position. We are to-day the largest direct suppliers of re-cleaned grass seeds to the farmer in America. The quantities we now sell are in many cases ten times as large as we sold even so recently as ten years ago. This preëminence has been attained only by unceasing effort and by furnishing the highest grade of thoroughly re-cleaned grass seeds at moderate prices, and we are so equipped that no responsible merchant can undersell us for the same qualities; and if at times our prices appear high as compared with other offers, depend upon it that it is at the cost of quality, and we would warn our customers that the market is flooded with much inferior, and in many cases absolutely worthless, grass and clover seeds, while good, clean seed is well worth the prices we ask. Large quantities of grass and clover seed so infested with noxious weeds are on the market, and will find their way through some channel into the farmer's hands.

We extend a cordial invitation to all interested to

COME AND SEE OUR GRASS TRIALS

at our experimental farm, Hackensack, N. J. They comprise numerous plots, varying in size from a small trial up to a quarter of an acre, and are both interesting and instructive.

This catalogue will be found to be a complete list of the choicest grains, fodder plants, root crops and miscellaneous farm seeds, all of which have been grown from selected stocks and thoroughly cleaned with our improved machinery.

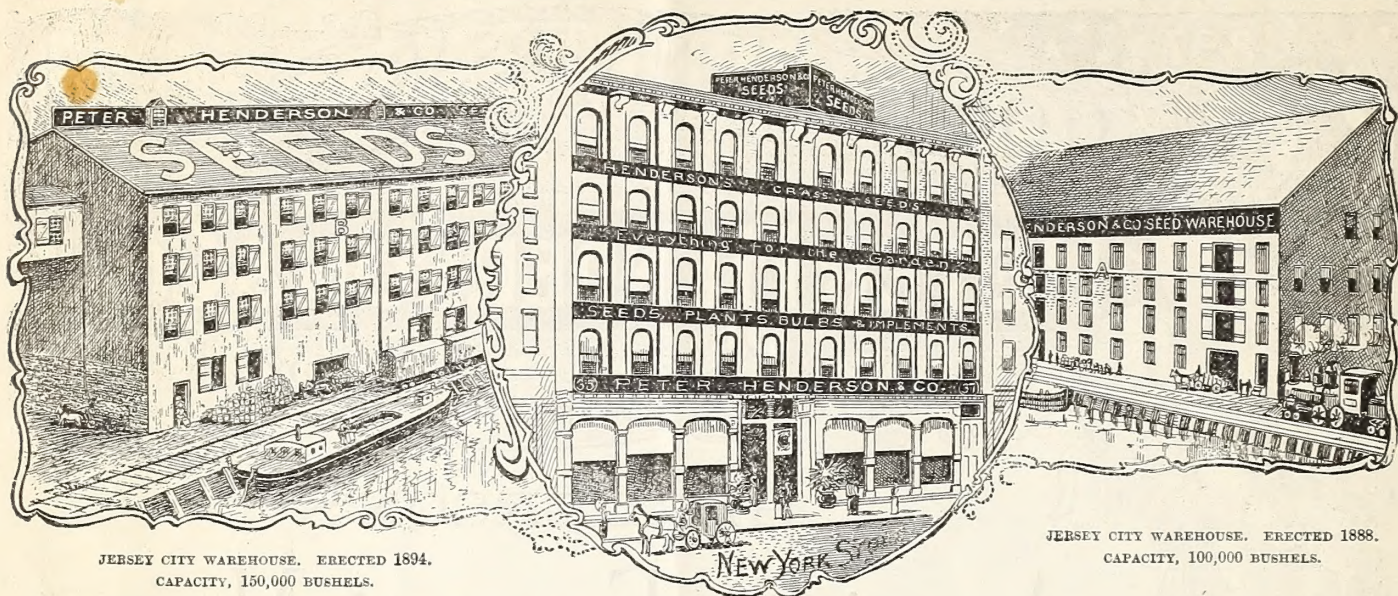
PETER HENDERSON & Co.,

35 & 37 CORTLANDT STREET, NEW YORK.

FEBRUARY, 1897.

... FARM MANAGERS. ...

We have from time to time applications by competent men for positions as farm and estate managers, men who have been trained to the business, and are well posted on agriculture generally, and the raising and care of all kinds of farm stock. We will be very pleased to enter into correspondence with those who require the services of such. We make no charge to either employer or employee.



THE above views show our Cortlandt Street store in the centre, and on either side the new warehouses (combined capacity, 250,000 bushels) which we recently found necessary to build in Jersey City to cope with and properly carry on our ever-increasing business. They are equipped with the most modern seed-cleaning machinery, enabling us to supply grass, clover and other seeds of the choicest quality and absolute purity. An indication of the excellence of our seeds is the fact that we were granted

THIRTY-THREE MEDALS AND AWARDS AT THE WORLD'S FAIR

for purity, cleanliness of sample and superior quality. With our grass and clover seeds we exercise the same care in testing, both as to germination and trueness of stock, that we do with our vegetable and flower seeds, and better qualities or better values cannot be purchased anywhere. All samples are carefully examined, in many cases by powerful microscopes, both before and after cleaning, and all lots are rejected which do not come up to our high standard, both in purity and in germinating qualities. **Our prices are made to meet the times, and are put at the lowest possible basis for such quality of seeds, AND IF LOWER PRICES ARE QUOTED YOU IT CAN ONLY BE AT THE EXPENSE OF QUALITY.** A notable instance of this kind recently came to our notice. A gentleman brought to us ten samples of orchard grass, **under number**, all being in exactly the same kind of package, and without saying who they were from or that one of them was our own, asked us to say which was the best value. More than one-half of them we promptly marked rubbish and cleanings, and the others were of very inferior quality, either naturally or by mixing in light seed and other cleanings, while many were purposely adulterated with rye grass and other cheaper seeds to bring down the value. **Such seeds can, of course, be sold cheap.** We picked out a sample (which turned out to be our own) as the only one in the lot worth the price asked, though it was higher in price than any of the others. Our grass mixtures for hay and permanent pasture have a national reputation, and are rapidly supplanting all the old methods of seeding down land to grass, and we invite all agriculturists to read pages 2 to 8, knowing they will prove interesting and profitable to all who desire

"MORE HAY AND BETTER PASTURE."

CORRESPONDENCE. We have made the subject of laying down land to grass, whether for hay or permanent pasture, or a lawn, a special study, as well as the improvement of land by plowing under suitable crops, the proper rotations to give best results, etc., and are pleased to advise our customers and invite correspondence on these subjects.

PETER HENDERSON & Co.,

35 & 37 CORTLANDT ST., NEW YORK.

From the *Florists' Exchange*, October 5th, 1895.

THE SEED-CLEANING MILLS. "For while the great bulk of all the seeds handled by this firm are well cleaned when received, yet so particular are they, and so exacting are the requirements of their trade, that nearly everything is put through their own mills before being sold. The mills are of the most approved styles, and it is something marvelous the work that they will do. At the time of our visit all the mills were under full blast and discharging from their various spouts, in some instances peas, and in others some of the finer varieties of grass seeds. In these days of keen competition the best equipped establishments forge to the front, and it certainly seems to us that it would be impossible to improve on the methods and machinery used by this firm."

RECORD OF A DRY SUMMER, 1895.

HENDERSON'S SPECIAL GRASS MIXTURES FOR HAY AND PERMANENT PASTURE.

The summer of 1895 will long be remembered as one of extreme drought which materially shortened the Hay Crop throughout the Eastern States, and in many sections the pastures were completely burned up.

At our own Trial Farm the superiority of our Grass Mixtures over the ordinary seeding of Timothy and Clover and all other grasses growing singly during the dry weather was most conspicuous, and it did not require a critical examination to show the cause.

The dense sod formed by the close habit of growth of the Mixed Grasses completely covered the ground and formed a perfect protection to the roots, and not only shielded the soil against the direct rays of the sun, but reduced evaporation, so that moisture could always be found much nearer the surface wherever the ground was thoroughly covered by a close growing sod. Our customers had the same experience, as the following letters show. These and the letters on pages 6 and 7 are strong endorsements of our claims that **Henderson's Special Grass Mixtures for Hay and Permanent Pasture** are superior not only to Timothy and Clover, but any other *one* grass, at all times, but especially in dry seasons.

I have been particularly well pleased with my sheep pastures during this exceptionally dry autumn. **They were seeded with your Permanent Grass Mixture six and seven years ago, and have steadily improved during that time. When ordinary pastures were bare during the dry weather, these gave constant feed.**

Other pastures, grazed by cattle, also seeded with your Mixture, have been very satisfactory. These were seeded two and three years ago. Very truly yours,

JAMES WOOD,

Mount Kisco, N. Y., Oct. 18th, 1895.

Ex-President New York State Agricultural Society, and New York State Agricultural Commissioner at the World's Fair.

The Permanent Grass Mixture bought of you has proved a complete success this year. After the hay was cut, there was a long drought, but the **aftergrowth has made more pasture than on all the rest of the Timothy fields (27 acres), and my horses and cows like it and thrive better on it.** A great many are feeding hay, but I have been pasturing this ten acres of Permanent Grass and it does not seem to diminish like the Timothy fields. I can highly recommend it; the stock fattens on the hay in the winter; in fact, I do not know how to praise it highly enough. I feel greatly indebted to you for the seed. Yours truly,

HOWARD NELSON.

Monsey, N. Y., Nov. 9th, 1895.

Your Permanent Grass Mixture has stood the drought we have had the last two seasons remarkably well, and after taking the hay crop off, has given abundant after feed. One field that was seeded down with Barley last year gave us two good crops of hay and is now affording splendid pasture for the cows. **Had we been depending upon Timothy, we would have been in the same fix some of our neighbors are in, very little hay and no after feed.** Yours truly,

W. G. APPEBY.

Bennington, Vt., Oct. 18th, 1895.

The Permanent Grass Mixture purchased from you two years ago was sown on a very trying piece of ground, and the first season we thought it a failure, but the next season, although very dry, the grass was fine and we cut two good crops. **The past season has been a very trying one on all ground this way, but the Permanent was good, and to-day looks like a lawn, after cutting two good crops.** Yours very truly,

J. DART & SON.

Hartford, Conn., Oct. 21st, 1895.

The Permanent Grass Mixture I got of you stood the drought much better than the Timothy. Yours truly,

ERNEST BURGDOFF.

Washington, D. C., Oct. 21st, 1895.

The permanent pasture is in **decidedly better condition after the prolonged drought than any other grass land on my place,** except the tennis ground put down with your lawn grass some years ago. Yours truly,

S. W. SWORDS.

New Hamburg, N. Y., Oct. 23d, 1895.

The field of mixed grass gave a good hay crop this year, and I do not see that it has suffered materially from the drought. Am pleased with it as compared with Timothy on my own place. Yours truly,

H. T. FOOTE.

New York, Oct. 28th, 1895.

The Permanent Grass Mixture I have used now for about eight years, and prefer it in every way for feeding purposes. My horses like it much better than Timothy, as also my cows. Parties who visit me here say they never saw their horses eat any hay like they do the Mixture.

So far as drought is concerned, I think it stands it better than the other grass. I would grow nothing else in the way of hay on my place. Yours truly,

JAMES CHESTERMAN.

New York, Oct. 19th, 1895.

We got more of a hay crop from your Permanent Grass Mixture than I had any idea of, and it stood the drought very well. Yours truly,

JOHN B. RUSSELL.

Richmond Hill, L. I., Oct. 18th, 1895.

I sowed some of your Special Grass Mixture on land which had been rented to different parties for a number of years and was considered too poor to seed down and insure a catch. I sowed in April with fertilizer. The soil is a sandy loam and inclined to leach. I did not cut it the first season, which was a mistake, for the late growth of the Orchard Grass was so strong that it weakened the other grasses. Last year and this year I got fair crops, and nothing has been put on the land since time of sowing. I do not call this a fair test of its merits, but a severe one. One grand feature is that **it holds the ground; Ragweeds, Dewberry and Fivefinger vines have not put in an appearance. If Timothy and Clover had been used the weeds would have taken possession.**

JAMES B. PALMER.

Branford, Conn.

Your Permanent Grass Mixture has stood the drought well, and is better than Timothy or any other grasses that have been tried here as pasture. Comparing it with hay, think them about equal in merits. Yours very truly,

BRIAR CLIFF FARMS.

Whitsons, N. Y., Oct. 17th, 1895.

The Grass Mixture has stood the drought very well, and has proven to be the best for late pasture. Very truly,

A. R. ALLEN.

Wyckoff, N. J., Oct. 25th, 1895.

The results were entirely satisfactory; the aftergrowth has been good. I think the Mixture superior to any other seed I have ever used. Very truly yours,

E. A. TUTTLE.

New York, Oct. 28th, 1895.

The field on which I sowed the Grass Mixture mowed a very good crop of hay, and the grass is now better than our fields that were sown with Timothy. Yours truly,

A. A. CORTELYOU.

Neshanic Station, N. J., Oct. 29th, 1895.

There is no comparison whatever between the way in which the Timothy and the Grass Mixture have stood the drought. The meadow which I planted with Grass Mixture last year is much better than it was in the spring, whereas the Timothy has, I think, suffered from the summer. Yours truly,

CHARLES M. MARSH.

New York, Oct. 28th, 1895.

I am well pleased with the grass seed you sent me. I am getting all my meadows seeded with Permanent Grass seed; prefer it to Timothy or any other kind of seed. Truly yours,

JOHN SHIELDS.

Flemington, N. J., Oct. 18th, 1895.

THIS SPEAKS VOLUMES.

HENDERSON'S SPECIAL GRASS MIXTURES

FOR HAY AND PERMANENT PASTURE.

CAN BE SOWN IN EITHER SPRING OR FALL.

Read what the Agricultural Press and our Customers say about Henderson's Special Grass Mixtures.

PERMANENT PASTURE.

HENDERSON'S SPECIAL GRASS MIXTURE for Permanent Pasture, consisting of the following varieties, Orchard Grass, Meadow Foxtail, Tall Meadow Oat Grass, Sheep's Fescue, Rhode Island or Creeping Bent, Hard Fescue, Sweet Scented Vernal (True Perennial), Meadow Fescue, English Rye Grass, Kentucky Blue Grass, Italian Rye Grass, Red Top, etc., as recommended in our book, "*How the Farm Pays*," blended in the proper proportions, we will supply for

\$2.50 per bushel of 14 lbs. (20-bushel lots, \$2.45 per bushel).

The amount of seed necessary to sow an acre largely depends on the quality of the land; the poorer the soil the larger the quantity required. Taking one soil with another, and owing to the fact that the seeds we use are of higher quality and better cleaned than ever, a fair average would be **3 bushels to the acre**. The thicker the seeds are sown, the sooner will a fine close turf be obtained. While the leading variety used in these mixtures is Orchard Grass, the addition of the several other Grasses named add to its value; because Orchard Grass sown alone has a tendency to form tussocks or clumps, which, however, can be overcome by thick seeding.

We have heard the claim made that Orchard Grass is tough and pithy. It should be borne in mind that Orchard Grass is about **three weeks earlier** than Timothy, and that it will certainly be **pithy if allowed to stand** and be harvested at the same time as Timothy. If cut at the proper time, however, there is no grass which makes better hay.

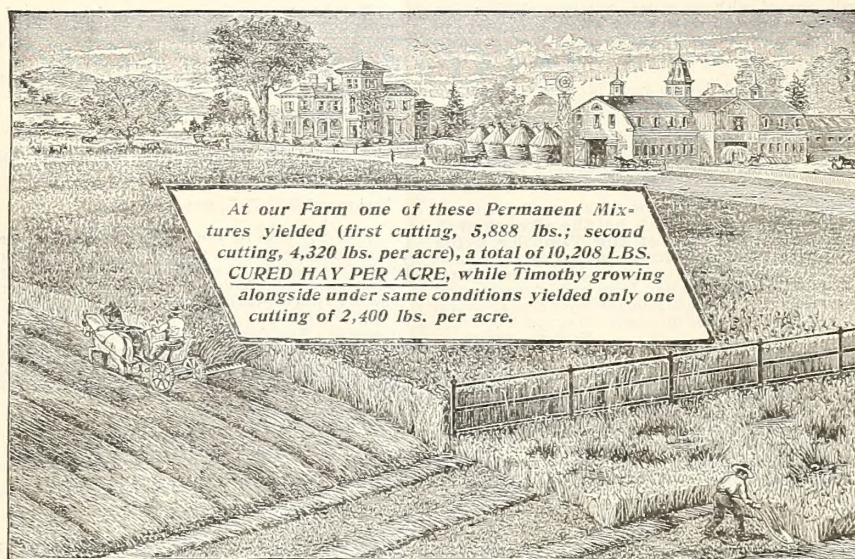
That the superiority of these Mixtures over Timothy and Clover is an assured fact, we refer to pages 6 and 7. Thousands of the most progressive farmers, during the past few years, have seeded from ten to hundreds of acres with most satisfactory results, and we may mention that one of the largest Stock Farms in the United States, after most careful investigations and experiments, recently ordered from us sufficient to seed down nearly one thousand acres.

The Country Gentleman says:

By invitation of Messrs. PETER HENDERSON & Co., of New York, a representative of this paper visited their experimental grass plots.

These tests are for the purpose of improving our hay product and the pasturage of our animals—not only to increase the annual yield, but to make more permanent both meadow and pasture. Instead of three or four varieties, ten to fifteen are used; tall and short grasses, coarse and fine, are deftly combined in varying proportions according to the end in view.

Below the taller grasses was a thick mat of finer kinds, and the close, rich turf hid every particle of soil. There did not seem to be room for another spear of grass. Going over to an ordinary Timothy meadow near by, the contrast was striking. The individual spears in a foot square could easily be counted; "standing-room" for more was abundant. The soil had not been "worked for all it was worth," and the thoughtful farmer might do some suggestive figuring.



At our Farm one of these Permanent Mixtures yielded (first cutting, 5,888 lbs.; second cutting, 4,320 lbs. per acre), a total of 10,208 LBS. CURED HAY PER ACRE, while Timothy growing alongside under same conditions yielded only one cutting of 2,400 lbs. per acre.

Write us the nature of your land and the object you have in view. We will advise the best grasses to use and make up a special mixture if necessary.

Farm and Home says:

This subject is an important one, and the renewing of meadows and pastures is of interest to all farmers. There are many in which two or three acres will not support a cow, and if these can be reseeded and brought up to a greater growth, much more profit will be realized from the farm.

The enormous yield of nearly $4\frac{1}{2}$ tons of good hay per acre should convince any one that more hay and better pasture can be grown with mixtures than with timothy and clover alone, as, under the very same conditions, the latter yielded less than a ton and a half (2,760 lbs.) per acre. Timothy, after being cut, throws all its strength into storing food in a bulbous swelling at the base of the stem, upon which its next season's growth depends, and hence cannot be pastured nor cut a second time without seriously injuring the next year's crop. The grasses in both the temporary and permanent mixtures grow direct from the roots, which are dense and fibrous.

Henderson's Special Grass Mixture for Hay and Permanent Pasture for Light soils.						} \$2.50 per bushel of 14 lbs. 20 bushel lots, \$2.45 per bushel.
"	"	"	"	"	"	
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Special quotations for LARGE quantities.

To this mixture, intended for either Mowing Lands or Pasture (but which, on account of its greater weight, should be sown separately), is to be added 10 lbs. of Mixed Clovers, comprising White, Mammoth Perennial or Cow Grass, Alsike, Trefoil, etc., but this should only be sown in the spring, as it is rather tender in this latitude if sown in the fall.

The quantity needed (10 lbs.) of MIXED CLOVERS to sow an acre we will sell for \$2.00.

At first sight \$7.50 to \$10.00 per acre appears to be a high price for the seeding of a pasture, but bear in mind that it is a permanent pasture that we have in view, and nowhere can a permanent pasture be laid down properly for a less original outlay than that we name.

FULL DIRECTIONS FOR SOWING ENCLOSED IN EVERY BAG.

HENDERSON'S SPECIAL GRASS MIXTURES

FOR HAY AND TEMPORARY PASTURE.

CAN BE SOWN IN EITHER SPRING OR FALL.

Read what the Agricultural Press and our Customers say about Henderson's Special Grass Mixtures.

TEMPORARY PASTURE.

To those who prefer **TEMPORARY** mowing or grass lands to permanent pasture, we will prepare mixtures of clovers and grasses for what is known as "Alternate Husbandry or Rotation Cropping." These mixtures are adapted to the rotation of crop for which they are prepared and in such proportions as will produce the largest quantity of nutritious food for the duration of time specified.

The grasses best adapted for this class of pasture are the following: Orchard Grass, English Rye Grass, Italian Rye Grass, Tall Oat Grass and Meadow Fescue, Red Clover, White Clover, Alsike, Trefoil and Timothy, blended in their proper proportions for the time required. We recommend the following quantities per acre. The grasses may be sown in spring or fall, but the clovers should be sown in spring, for in this latitude they are apt to be winter-killed, being rather tender in the young state.

For One Year: 1 bush. Mixed Grasses, \$2.50.	10 lbs. Mixed Clovers, \$2.00.	Total cost per acre, \$4.50.	} (SPECIAL QUOTATIONS FOR LARGE ACREAGES.)
For Two Years: 2 bush. Mixed Grasses, \$5.00.	10 lbs. Mixed Clovers, \$2.00.	Total cost per acre, \$7.00.	
For 3 to 4 Years: 3 bush. Mixed Grasses, \$7.50.	10 lbs. Mixed Clovers, \$2.00.	Total cost per acre, \$9.50.	

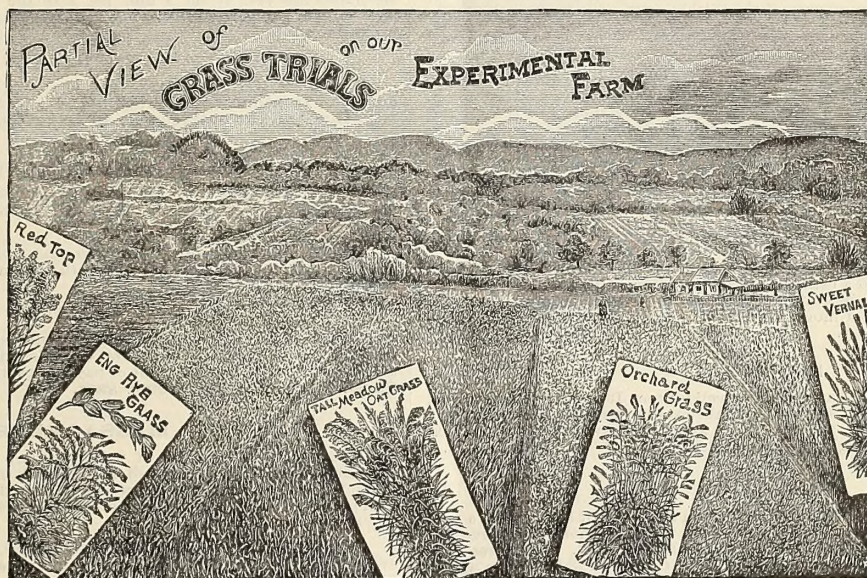
At our Farm one of our Permanent Mixtures yielded 10,208 lbs. Cured Hay per acre, and one of our Temporary Mixtures 9,120 lbs. Cured Hay per acre, both in two cuttings, while Timothy growing alongside under the same conditions yielded only one cutting of 2,400 lbs. per acre.

The American Agriculturist says:

While timothy is a valuable grass, there are some other kinds so much better, which last longer, yield a heavier crop, will stand various climatic and soil conditions better, that it is astonishing that the majority of farmers should still stick to the timothy, without even giving one or more of the other kinds and mixtures a fair trial.

When it is considered that by a very small additional outlay at least double the yield that can be produced by timothy will be obtained by the use of other grasses and mixtures, which are of just as good quality as timothy, and some of them better, it is strange that farmers are not willing to depart from the old, deep-worn ruts, and thus effect considerable financial gain.

A discriminate mixture of grasses and clover gives a better result than does any kind grown by itself, for the simple reason that mixtures are bound to grow closer together on the ground, and thereby their component species protect one another from undue heat and drought.



Write us the nature of your land and the object you have in view. We will advise the best grasses to use and make up a special mixture if necessary.

"How the Farm Pays" says:

Twenty years ago timothy was the only grass I grew, until my observation taught me better, and I have since entirely abandoned it. I am so well satisfied with the results of growing these Mixtures that I could not be induced to go back to growing timothy. I believe that one of the greatest mistakes that the farming community is making to-day is the almost universal one of growing timothy as the base grass for haying lands. Orchard grass is much better fitted to be the leading kind in mixtures, whether for pasture or for hay, and I place it far in advance, not only of timothy, but of any other grass we have thus far in cultivation. Any one acquainted with the roots will see at a glance that it is a plant better fitted for permanency.

HENDERSON'S RENOVATING MIXTURE FOR IMPROVING OLD PASTURES.

\$2.50 per bush. of 14 lbs. 20-bush. lots, \$2.45 per bush. Mixed Clovers, 20 cts. per lb.

Grass lands, in consequence of being constantly mown or pastured without being fertilized or manured, frequently become impoverished and deficient in the more valuable and nutritious grasses, and in time become unprofitable. It is needless waste and unnecessary to plow up such land unless it be full of weeds. The turf should be well harrowed with a sharp tooth harrow and, if possible, top-dressed with soil and well-rotted stable manure, which should be well harrowed in, and then sown with **Henderson's Renovating Mixture** at the rate of one bushel per acre, and five pounds of mixed clovers. This mixture is composed of those sorts that are best suited for sowing on old pastures or meadows, and it will speedily improve the quality and increase the produce. March and April are the best months for sowing, choosing an interval between rains if possible, though, if inconvenient to sow then, very satisfactory results can be obtained by fall sowing. After sowing, the ground should be lightly harrowed and afterward well rolled.

In the preparation of these mixtures for Permanent and Temporary Pasture, the greatest care is exercised in selecting such varieties as are suited to the soil to be laid down and are likely to realize the object in view. To facilitate this, a description of the soil and climate, the range of temperature, and the purpose for which sown, and if with or without a crop, should accompany each order.

FULL DIRECTIONS FOR SOWING ENCLOSED IN EVERY BAG.

Henderson's Special Grass Mixtures

FOR HAY AND PERMANENT PASTURE.

As we sometimes receive letters from correspondents doubting the suitability of our Grass Mixtures for their section, we assure all that they are well adapted for every section except the extreme Southern and Southwestern States.

Wherever Timothy will grow, our Grass Mixtures succeed and far out-yield Timothy or any other one grass in quantity of hay and in abundance and quality of pasture—the following letters, selected from hundreds, being conclusive proof of this assertion:

PENNSYLVANIA.

I will not seed down until spring as we are in such a drought that nothing will grow. Rye and wheat will scarcely germinate. Your grass seed upon Mr. Wayne McVeagh's farm is the greenest spot here; it looks well, although such a dry time.

JOHN G. GARDINER.

The Special Grass Mixtures you sent me for my farm at Radnor have been most successful in spite of an unusually trying season and some bad washings.

J. G. CASSATT.

The growth is simply wonderful, and do not think there is any other grass to equal it for hay or pasture. I sowed about ten acres, from which I have cut two hay crops that I consider the best hay ever made on my farms. Have only had two years' experience with it, but am so well satisfied that I would not plow it down for any other crop that can be raised.

J. S. LONG.

The Permanent Grass seed bought of you has proved a luxurious success. The result exceeds my expectations. In short, I think it the best grass seed to be had, and shall use fifty bushels more in the spring.

W. H. REED.

The Grass seed sent me, turned out well. It makes a good grass for meadow, or for grazing. It is fine, close grass, and the cattle like it.

PAUL A. OLIVER.

The Permanent Pasture Grass was a perfect success. We never had such a good yield of grass. We mowed our meadows twice.

WM. SIMPSON & SONS.

The Grass Mixture was sowed after rye, and after the rye was harvested, particularly in the fall, the green appearance of the field attracted universal attention. The seed seemed to get hold of the soil completely—no bare spots, but the ground entirely covered. The past summer I was compelled to pasture the five acres seeded with the Special Grass Mixture and it gave twice as much pasture as if seeded with clover and timothy alone. And now it is green and beautiful with a good stand of grass, having been pastured continuously from May to the present time, with the exception of one month. It has far surpassed clover and timothy in the amount it yields.

J. B. CUMMINGS.

MAINE.

I laid down some three or four acres with your Special Mixture of Grass seed early last September and had a beautiful "catch." It was the wonder of all, and many persons thought it must be grain; it certainly looked splendidly. I did not succeed in getting four tons or more per acre, but I did get more than from anything else, and it is splendid hay.

GEO. M. HOLMES.

INDIANA.

Your Special Grass Mixture has done very well for me. It produced, this season, the largest crop of hay that I ever saw cut off the ground, and has been yielding a most excellent pasture for over a month past, and this notwithstanding the extraordinary severity of the drought in this vicinity.

R. S. TAYLOR.

GEORGIA.

The Temporary Pasture Grass bought from you and planted last March, a year ago, is the finest grass I ever saw. I am quite sure we made more than three and a half tons per acre. It was planted on well-drained bottom-land. I got three good cuttings; the first yielded 23 two-horse wagon loads, the second 18 two-horse wagon loads, and the third 20 two-horse wagon loads, from about six acres.

PAT. CALHOUN.

Last year we had 100 bushels of your Mixed Pasture Grass seed. We sold to parties around us for trial and it proved a success. We have one pasture of the same in Cullasaja, N. C., and it is said to be very fine.

BIDWELL & CO.

MONTANA.

The quality of the hay from the Permanent Pasture Grass was very fine. The whole came through the winter in good shape. We are quite well pleased with the outlook for good crops of hay.

W. N. TENEYCK.

NEW HAMPSHIRE.

The quality of the Permanent Pasture Grasses is all that could be desired, as it makes fine hay.

DANIEL GILMAN.

Your mixtures are unquestionably earlier than our common seed.

GEO. B. LEIGHTON.

NORTH CAROLINA.

The grass seeds purchased from you, and, in fact, all my other dealings with your house, give entire satisfaction, and I hope soon to send you new orders.

TIMOTHY DOLAN.

COLORADO.

Your Grass Seed has given the best of satisfaction. They are the most reliable I have ever used.

SAM. STEVENSON.

VERMONT.

I have used your grass seeds for several years, and they are easily the best in the market.

F. C. KIMBALL.

The Henderson Lawn Grass I bought of you I sowed in the spring, and at mid-summer the turf was as firm and covered with grasses as though it had been sowed two years or more. The Orchard Grass I sowed with Clover, and it did better than I expected. I am more than pleased with the results of both, and am satisfied that P. H. & Co.'s seeds are unsurpassed.

C. F. HASTINGS.

VIRGINIA.

I am very much pleased with the Permanent Grass. I have in a sixteen-acre field three acres of Permanent Grass and one of Orchard Grass and Clover, and I think I can say truthfully that I have pastured more stock on the four acres than on the balance of the field. Of course, the drought has been trying on all grasses.

M. M. CAMPBELL.

My manager is enthusiastic over your Mixture for Hay and Permanent Pasture. He claims this year he cut 3 tons per acre the first cutting, 1½ tons the second, and will cut 2 tons the third. The field is a grand sight. People come for miles around to see it.

E. E. BARNEY.

IOWA.

The Grass Mixture I got of you has done extra well, especially this year of drought. It stood the drought and yielded about twice as much as timothy, and the cattle seem to do better on it.

WILLARD WATSON.

MARYLAND.

In about 600 acres sown by me, some 250 were in open cleared woodland, the balance fields. In all cases the Grass Mixture took uniformly well and gave very satisfactory results.

W. T. BARNARD.

It gives me pleasure to inform you that from the Grass seed I bought of you I got a good stand and a splendid growth. I am well pleased; it does well in this section.

S. C. JONES.

OHIO.

The Special Grass Mixture that I purchased from you last fall for permanent meadow has given us the very best of satisfaction. It made a wonderful growth and has given us a large amount of hay and pasture per acre. It produced the finest piece of grass I ever saw.

W. J. HAYES.

MASSACHUSETTS.

I cut 80 one-horse loads of well-cured hay from the Grass Mixture. My man estimated one-half ton per load, and I think it was near that. This year I had as much for the first crop, but on account of drought the second crop was light. I am well pleased with the result and am satisfied I got much more than I would from any one kind of grass.

GUY SMITH.

The seed for the meadow land was all right, and has proved a great success in every way. I have cut two heavy crops each year.

W. H. FAIRBANK.

The Grass Seed came up so rank I had to cut it the forepart of June, a very heavy crop of nice hay.

E. L. BARTLETT.

Your Grass Mixture has proved far better than timothy or any other mixture I have ever tried. We sowed your mixture for two years, as we had a farm on a lease that was to expire in that time. We cut two big crops of hay in that two years and the cattle were turned in and allowed to graze it close each fall. This is the third year and there was a heavy crop cut on it two weeks before timothy was ready, and, much to my surprise, there was quite a good second crop in spite of the very dry season, and it is looking well at present. I shall seed all my grass with your Mixture in the future.

H. L. PARK.

I had four bushels of your Special Grass Seed Mixture in the fall of 1887, and the same amount last season, and I am well satisfied with the result, as I cut more hay from the land I used your seed on than from land seeded with seed usually sown about me.

AUSTIN W. WARD.

The Grass Seed turned out very satisfactory, and we have this year cut three large crops of grass from the land seeded last fall with the seed bought of you.

G. E. ROGERS.

WISCONSIN.

The Grass Seed sent us grew nicely and gave good satisfaction.

KNAPP, STOUT & CO.

KENTUCKY.

I sowed 40 bushels of your Permanent Pasture Grass in an apple orchard on my place last spring, a year ago, and it has done everything you claimed for it. I am perfectly satisfied with it, and will speak a good word for it when I can. It is one of the best weed killers that I have ever seen.—PHIL. TOMPERT.

Henderson's Special Grass Mixtures

FOR HAY AND PERMANENT PASTURE.

NEW YORK.

If weather had been favorable, results would undoubtedly have been all that could be desired; as it is, the past season we cut much the heaviest crop from the field where your mixture was sowed. H. BOOL.

Your Special Grass Mixture came up well and made a good stand, although a heavy crop of oats was taken from the ground in August. Next June it was cut for hay, and was the heaviest grass in this vicinity. It also furnished some pasture in the fall. This year it furnished pasture in the spring at least a week before other grass had started, and has stood the severe drought much better than Timothy or any other pastures which I have seen in this section. D. C. DRAKE.

The Special Grass Mixtures, as well as all the other seeds I have purchased from you, have given me entire satisfaction. J. KENNEDY TOD.

My field of five acres, seeded with your Special Grass Mixture, furnished good and continuous pasture to six cows, right along, when the rest of my meadows were as brown as a leaf in winter; and it was upland, too.—JONATHAN C. PIERCE.

Your Special Grass Mixture greatly surpassed in yield the ordinary fields of Timothy and Clover, the difference in the aftermath being particularly noticeable during our past dry summer. S. A. SMITH.

I cannot praise your Special Grass Mixture high enough, because I got an even stand of grass and a much even sod, and, of course, better pasture. I shall use some more of the Special Mixture next spring, as I am going to seed down some more ground. GEO. W. BAKER.

Your Grass Mixture looks better than any other meadow we have on the whole farm. CHARLES LAUTZ.

Your Permanent Pasture, and also Lawn Seed, have been very satisfactory, indeed, the pasture seed especially, after three years laying down, still gives excellent product, and we cannot discover that any part of the grasses have died out. C. H. POPE & CO.

I have used your Special Grass Mixtures for the past ten years; I use nothing else, and have found them satisfactory. I sell nothing off my place, but use your mixture for hay and for permanent pasture for thoroughbred stock. The hay is excellent, and we can gather it about ten days earlier than our neighbors do their Timothy. We have had an unusually dry summer, and I think that your mixture has withstood the drought better than other kinds of grasses. We intend to lay down two fields next year and shall use your mixture. I consider your mixture to be the best that can be used in this section, either for hay or permanent pasture. BENJ. D. HICKS.

I have found the Special Grass Mixture thoroughly satisfactory, the crop being much in excess of ordinary grass seeds or Timothy used in the neighborhood, and, though the season has been unusually dry this summer, no evidences of injury to the grass are apparent. As an evidence of my satisfaction, I have seeded down another lot this fall, using the same seed. JAMES A. MILLER, JR.

The Special Grass Mixtures bought from you have given every satisfaction, and, after my experience with them, I should never think of planting Timothy again. CHARLES H. LEATCRAFT.

I have four acres of your Permanent Pasture and Hay growing; no one about here knows anything about it. When should I cut it, and does it require special treatment in curing? It's the finest piece of grass anywhere about here. An old farmer told me last week it would cut 3½ tons to the acre sure. JAMES M. RICHARDS.

The mixture of grasses I purchased of you some time ago was intended for seeding a plot, the location of which is high and very rocky; nevertheless, your mixture has done very well, and, notwithstanding the severe drought of last summer, has cut a second crop of hay. F. DASSORI.

I have used your Special Grass Mixtures on our very sandy soil, and find that they yield more in quantity and stand the drought much better, and last longer without renewal. GEO. H. PENNIMAN.

The grass seed for permanent hay I sowed the same time I sowed a patch of Timothy; I have plowed the Timothy and re-seeded it, but your mixed grass seed has made a fine sod, although we have had two very dry summers. Last summer we had no rain in three months, the grass looked like the middle of winter; but we have had a few rainy days, and I have a fine lot of feed on my eight acres of your mixed seed. My cows are on it every day, and they have gained in milk. STEPHEN C. VANWYCK.

Your Special Mixture of Grasses was a success; compared with Timothy and Clover, the yield is double. OSCAR SILLECK.

The difference in favor of your mixture was as conspicuous this year as on ordinary seasons. Your hay comes earlier, is greater in quantity and has a stronger aftergrowth than any grass seed I know. T. B. BROOKS.

Your Special Grass Mixture pleases me very much. The piece sown with it was mown this year for the first, and cut a large crop of very fine hay. But what pleases me most is the abundant pasture it affords. All summer, even in the very driest weather, it kept fresh and green, and grew about as fast as eaten off. It has yielded more than double the amount of pasture a piece of Timothy and Clover of the same size would have done under the same conditions. Shall sow more in the future, when I have occasion to seed, as I think it more profitable than Clover and Timothy, which is usually sown in this locality. FRANK G. MCCOLLUM.

I take pleasure in reporting the result of a sowing of your Special Grass Mixture. It was seeded on about two acres of pretty poor, stony soil, which was only slightly manured. The first year I cut not less than five tons of hay from this piece, and this I cut not less than seven tons from it, though no top-dressing or other attention had been given it in the mean time. I look upon this as highly satisfactory, and with more manuring it would undoubtedly have made a very much better showing. I can say that I am unqualifiedly satisfied with your grass mixtures, and I have used them exclusively in seeding of considerable extent, which I have put in. THOS. W. LUDLOW.

CONNECTICUT.

I have found your mixed grasses have given better crops of hay and remain better seeded than timothy and other grasses sowed alone. We have had here two very dry seasons in succession, the past one exceedingly so, and the mixed grasses have given better crops of hay and have not died out so bad as grasses sowed by themselves. After we had some little rain the mixed grasses started sooner and had a much greener look and have grown better afterwards. I would not again sow grasses alone, but would always sow the mixture. H. L. STEWART.

I used 30 bushels of your mixture for permanent meadow on seven acres in one field, and a little less than three acres in another. This year from the three acres I got 9 two-horse loads of excellent quality, and from the seven acres I got 28 two-horse loads. It was the opinion of the men that they would average a ton each. I expect to get a good second crop. The mixtures are better than the old-fashioned seeding of Timothy, Red-top and Clover. R. E. HOLMES.

Your Special Mixture of Grasses for Permanent Pasture has given entire satisfaction. One plot I have cut three crops from this summer. It is always beautifully green; starts up again as soon as cut, and keeps pace with Clover. I could say more in its praise, but this will suffice. No more Timothy for me. CHAS. EVERDING.

The Permanent Grass Seed which I bought of you gave entire satisfaction, considering the open winter, which, in my opinion was so injurious to young grass, it has not hurt it one particle. We have as a result a beautiful pasture. I may add that on the same piece of ground we had two failures with other Grass Mixtures. PATRICK BARRY.

The Permanent Pasture Grass I had of you grew well and made a fine sod. It is both early and late for hay, and makes fine late fall feed, as a pasture. The hay is a fine neat stock hay. I sowed it where I do not want to break it up, and as a "permanent" think it is a great success. WM. MEGGAT.

The 16 bushels Permanent Pasture Grass you sent me has proved a perfect success. I shall want more in the spring. J. S. MACFARLANE.

RHODE ISLAND.

I am very well satisfied with the Mixture of Permanent Grass Seed I bought of you. Have had very good crops of hay and fine pasture. The past season has told badly upon meadows and pastures in my vicinity, but I cut full as much hay as usual and have had good pasture in the lot seeded with your mixtures, whereas my other lots have been badly burnt and little or no feed in them. I tried your mixture in order to avoid making "Daisy Hay," which seems to be the prevailing kind all about me, and I am glad to say I have so far succeeded in being free of that pest.

As to quick growth after cutting, it has exceeded my expectations, and each year the lot looks like a lawn in a few days after cutting. JULIUS PALMER.

The Permanent Pasture Grass had from you has given every satisfaction. ROBT. CROSSLEY.

I take pleasure in stating that the Permanent Pasture Grass came up thickly and yielded a very fine crop, and promises well for another season. I shall buy more seed. G. S. STEVENS.

NEW JERSEY.

We are well pleased with the Special Grass Mixtures; the past season has been very dry with us, but when we used your seed we mowed a very good crop the 20th of June, and in two weeks had good pasture—the best in the township, and very good now, and much admired by the neighboring farmers. Our Timothy meadow is nearly all killed or dried up, no pasture. But the Special Grass Mixture is now very nice and green. I can recommend it as being first-class for mowing and especially for pasture. E. W. BRUEN.

Your Grass Seed gave very good satisfaction. It thickens up quickly and produces an abundant supply of pasture. It starts early and lasts well. JOHN MORFORD.

Your Grass Mixture was acknowledged by all who saw it to be the best field of grass in this section. I sowed the Grass Seed in fall, and your Mixed Clover in the spring. JOHN S. BIGELOW.

I have an even, solid stand of grass that affords ample pasture, and far better than those adjoining me who depend on Clover and Timothy. E. P. LAFETRA.

I have used no other grass seed since I commenced your Special Grass Seed seeding. My first and second crop was good this year. I have no further use for Timothy and Clover. A. A. DRAKE.

A few words about the Grass Seed I bought of you. I am very well satisfied with it and can recommend it to anybody. It is good for hay and pasture. HENRY BREUSCH.

The first lot of your Permanent Pasture Mixture, about eighty bushels, I sowed in the fall of 1892. In 1893 I had two crops, together about 2½ tons to the acre. In 1893, off the same field, from two crops about 3½ tons per acre. E. J. GEHLEN.

The Special Grass Mixture which I obtained from you three years ago has given most excellent satisfaction. It stood the drought this summer without injury, and yielded me a crop of hay more than twice as great per acre as the Timothy seed, which I sowed alongside of it at the same time and with the same care and fertilizing that I gave yours. R. V. LINDABURY.

The Special Grass Mixtures produced a smoother, more uniform, and, I should say, more compact sod than either Timothy or Clover. The two latter grasses, at least after the first year, seem to form and gather in bunches, and do not cover the ground smoothly all over. But not so with the Grass Mixtures, their appearance is more like that of a well-cultivated lawn. JOHN LINN.

For the past three years our grass has been very heavy, and last summer, in spite of the dry weather, we had a very good crop—a great deal better than our neighbors who have the common grass seed. J. M. SIMPSON.

NATURAL GRASSES.

Descriptions of varieties adapted to all soils, climates and conditions in the United States.

"GRASS IS KING." It embraces one-sixth part of the whole vegetable kingdom, and is the true basis of Agriculture in the highest condition.
 "No grass, no cattle; no cattle, no manure; no manure, no crops!"

CREEPING BENT OR FIORIN. (Marsh or Broad Leaved Bent.)

Botanical, *Agrostis alba stolonifera*. German, *Fioringras*.
 French, *Agrostide blanche stolonifera*.

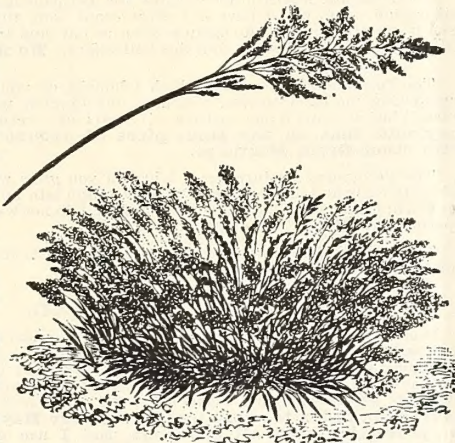
Perennial. Time of flowering, July. Height, 1 to 2 feet.

This grass is well adapted for moist situations, and valuable for affording herbage in early spring and late autumn, before other grasses have commenced or have stopped growing, and in consequence is advantageously included in permanent pasture mixtures. It is also excellent for lawns.

Sow (if alone) 2 bushels per acre.

Weight, about 20 lbs. per bushel.

Price, 22 cts. per lb.; \$3.50 per bushel; \$18 00 per 100 lbs.



CREEPING BENT.

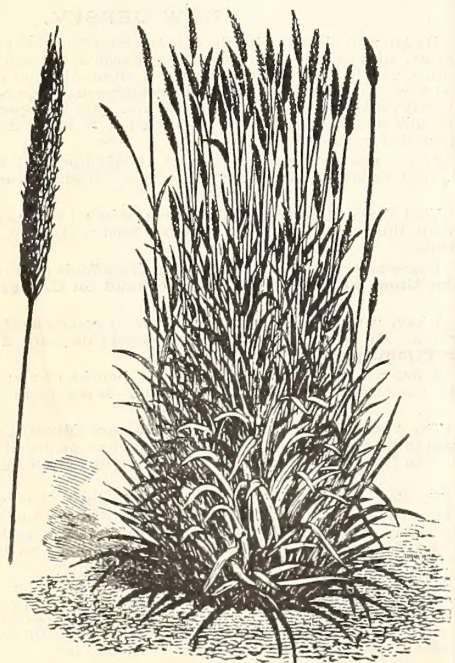
MEADOW FOXTAIL.

Botanical, *Alopecurus pratensis*. German, *Wiesen Fuchsschwanz*.
 French, *Vulpin des prés*.

Perennial. Time of flowering, May. Height, 2 to 3 feet.

This grass closely resembles Timothy, but flowers much earlier, and thrives in all soils excepting dry sands or gravels. Its highest state of perfection is attained in strong, moist, rich soils, and it is particularly valuable as a permanent pasture grass, being of very early and rapid growth. It is highly relished by stock; endures close cropping and forms a luxuriant aftermath, and quickly revives after a long drought. It is very nutritious, but unfortunately loses a large percentage in weight after being cut for hay. Sow (if alone) 3 to 4 bushels per acre; weight, about 7 lbs. per bushel.

Price, 35 cts. per lb.; \$2.30 per bushel; \$32.00 per 100 lbs.



MEADOW FOXTAIL.

TALL MEADOW OAT GRASS.

Botanical, *Arrhenatherum avenaceum*. German, *Französisches Raygras*.
 French, *Avoine élevée*.

Perennial. Flowers in May and June.
 Height, 2 to 4 feet.

(This is the *Avena Elatior* of Linnaeus.) Valuable for permanent pastures on account of its luxuriant early and late growth. It is also highly recommended for soil, as it furnishes an abundant and early supply of fodder; after being mown it produces a very thick aftermath. It grows spontaneously on deep, sandy soils when once naturalized, and succeeds on tenacious clover soils. Sow (if alone) 4 to 5 bushels per acre; weight, about 10 lbs. per bushel. Price, 25 cts. per lb.; \$2.25 per bu.; \$20.00 per 100 lbs.



TALL MEADOW OAT GRASS.

RHODE ISLAND BENT. (Brown Bent or Dog's Bent.)

Botanical, *Agrostis canina*. French, *Agrostide des chiens*.

Perennial. Time of flowering, June and July. Height, 1 to 2 feet.

Its hardy creeping habit renders it desirable for close sward, and it is found to be a very desirable sort in some parts of the country for lawns. Sow (if alone) about 3 bushels per acre; weight, 14 lbs. per bushel. Price, 22c. lb.; \$2.75 bushel; \$18.00 per 100 lbs.

AWNLESS BROME GRASS.

Botanical, *Bromus inermis*. German, *Trespe de Hongrie*.
 French, *Brôme de Hongrie*.

Perennial. Time of flowering, June to August. Height, 2 to 5 feet.

For price, full description and illustration of this valuable new grass, see page 14.

ROUGH STALKED MEADOW GRASS.

Botanical, *Poa trivialis*. German, *Gemeines Rispengras*.
French, *Paturin commun*.

Perennial. Time of flowering, July. Height, 2 to 3 feet.

The Lombardy "Queen of Meadow" Grass. An excellent grass for good, deep, rich, moist meadows and stiff, heavy clays. It gives a constant supply of highly nutritive herbage, for which horses, sheep and cattle show a marked partiality. Sow (if alone) $1\frac{1}{2}$ bushels to the acre; weight, about 14 lbs. per bushel. Price, 45 cts. per lb.; \$6.00 per bushel; \$42.00 per 100 lbs.

ORCHARD GRASS. (Rough Cocksfoot.)

Botanical, *Dactylis glomerata*. German, *Gemeines Knaulgras*.
French, *Dactyle pelotonné*.

Perennial. Time of flowering, June. Height, 3 feet.

This is one of the most valuable and widely known of all the grasses, being of exceptional value in permanent pasture mixtures



ORCHARD GRASS.

on account of its earliness and its rapidity of growth. It is ready for grazing several days before any other grass, except Meadow Foxtail. After being mown it produces a luxuriant aftermath. It is quick to recover from close cropping, "five or six days being sufficient to give a good bite." It is relished heartily by all kinds of stock, sheep even passing all other grasses to feed upon it. It succeeds on almost any soil, especially in moist, shady places, and in porous subsoils its roots extend to a great depth. It exhausts the soil less than many other grasses, and stands drought well, keeping green and growing when other grasses are dried up. It flowers about the time of Red Clover and makes a splendid mixture with it to cut in blossom for hay, although it should be cut early

SWEET-SCENTED VERNAL.

(True Perennial.)

Botanical, *Anthoxanthum odoratum*. German, *Gemeines Geruchgras*.
French, *Flouve odorante*.

Perennial. Time of flowering, May and June. Height, 1 to 2 ft.

Very valuable on account of its delicious perfume, to which our hay fields and pastures owe their fragrance. The odor is more distinguishable when the grass is drying or dried, and when included in hay its aroma is imparted to the other grasses, making it relished by the stock and enhancing the value of the hay. Sow (if alone) $3\frac{1}{2}$ bushels per acre; weight, about 10 lbs. per bushel. Price, 80c. per lb.; \$7.75 per bushel; \$75.00 per 100 lbs.

RED TOP.

(Burden's Grass, Herd's Grass of the South, and in poor soils "Fine Top.")

Botanical, *Agrostis vulgaris*. German, *Amerikan red-top*.
French, *Agrostis d'Amérique*.

Perennial. Time of flowering, July. Height, 1 to 2 feet.



RED TOP.

Valuable either for mixing in hay or permanent pasture grasses; is common throughout the country; succeeds almost everywhere, but reaches its highest state of perfection in a moist, rich soil, in which it attains a height of 2 to $2\frac{1}{2}$ feet. If for pasture, it should be fed close, as it is not relished after it grows up to seed. It is often sown with Timothy and Red Clover; the latter of course soon disappears, the Timothy follows; then the Red Top takes its place. Sow (if alone) 3 bushels; weight, 14 lbs. per bush. Price, 10 cts. per lb.; \$1.00 per bushel; \$7.00 per 100 lbs. Fancy.—Weight, 32 lbs. per bushel. Price, 30 cts. per lb.; \$8.00 per bushel; \$28.00 per 100 lbs.

HARD FESCUE.

Botanical, *Festuca duriuscula*. German, *Harter Schwingel*.
French, *Fétuque durette*.

Perennial. Time of flowering, June. Height, 18 to 24 inches.

A dwarf growing, very hardy grass of great value, and the most robust of the dwarf grasses. Succeeds in dry situations, and is one of the most important of the Fescues for permanent pastures.

In hay its presence indicates a superior quality, and after being mown it produces a very large quantity of food. It comes early, stands long droughts well; stock eat it with avidity, especially sheep. The common name solely applies to the flower heads, which, when ripe, become decidedly hard; the herbage, however, is decidedly tender and succulent. From the fineness of its foliage and its resistance to drought in summer and cold in winter, it is well adapted for lawn grass mixtures. It is somewhat inclined to stool, but when sown with other grasses, if sown evenly, it will not show this characteristic. Sow (if alone) $2\frac{1}{2}$ bushels per acre; weight, about 12 lbs. per bushel. Price, 25c. per lb.; \$2.50 per bushel; \$18.00 per 100 lbs.



HARD FESCUE.

We are prepared to make up Special Mixtures of Grass Seeds for particular purposes—situations or conditions—and any correspondence in regard to such will receive our prompt attention.—P. H. & Co. 200 N. 3rd St. St. Louis, Mo.

TALL MEADOW FESCUE.

Botanical, *Festuca elatior*. German, *Hoher Wiesen-Schwingel*. French, *Fétuque élevée*.

Perennial. Time of flowering, June and July. Height, 3 to 4 feet.

A coarse growing grass, nevertheless it is very nutritive and productive, and is naturally adapted to moist, stiff or clayey soils and shady woods, and is considered by some authorities to be one of the best grasses in cultivation. It is greedily eaten by stock when green, and should be included in all permanent pasture mixtures for moist or strong lands. It also makes a very good quality of hay, but is too robust for lawn purposes. Sow (if alone) 2½ bushels per acre; weight, about 14 lbs. Price, 35 cts. per lb.; \$4.50 per bushel; \$30.00 per 100 lbs.



TALL MEADOW FESCUE.

VARIOUS-LEAVED FESCUE.

Botanical, *Festuca heterophylla*. German, *Wechselblättriger Schwingel*. French, *Fétuque feuillée variées*.

Perennial. Time of flowering, June and July. Height, 2½ to 3 feet.

A native of France and a valuable grass for permanent pastures, especially on uplands, and is a very popular continental grass, well adapted where a heavy swath is wanted. It yields a large bulk of herbage, but produces little feed after mowing. Its beautiful, dark green foliage renders it suitable for park mixtures. Sow (if alone) 3 bushels per acre; weight, about 14 lbs. per bushel. Price, 25 cts. per lb., \$2.75 per bushel, \$18.00 per 100 lbs.



VARIOUS LEAVED FESCUE.

SHEEP'S FESCUE.

Botanical, *Festuca ovina*. German, *Schafschwingel*. French, *Fétuque des brebis*.

Perennial. Time of flowering, June and July. Height varies from 6 to 20 inches.



SHEEP'S FESCUE.

For good upland or dry pastures, a large portion of this grass should be included in the mixture, especially if it is used for sheep grazing, as it is greatly relished by them. The Tartars generally pitched their tents in proximity to this grass on account of its value to their herds. It is short and dense in growth, and its excellent nutritive qualities more than counterbalance its slight deficiency in quantity. Its fine foliage and compact habit render it desirable for lawn mixtures. Sow (if alone) 2½ bushels

FINE LEAVED SHEEP'S FESCUE.

Botanical, *Festuca ovina tenuifolia*. German, *Feinblättriger Schwingel*. French, *Fétuque à feuille menue*.

Perennial. Time of flowering, June. Height varies from 8 to 24 inches.

This is similar to the Sheep's Fescue mentioned above, except that the leaves are much finer. Cattle are very fond of it, and it grows naturally in many parts of the world. It is found in the Arctic regions, in the wilds of New Zealand, and in Europe. In the northern districts of Great Britain it sometimes forms the whole food of the Highland cattle. It is very suitable for permanent pasture, especially on uplands and dry soils. Its rich, dark green gives a fine appearance to hay, and renders it also valuable for lawn mixtures for dry situations.

Sow (if alone) 3 bushels per acre; weight, about 14 lbs. per bushel. Price, 35 cts. per lb.; \$4.25 per bushel; \$28.00 per 100 lbs.

RED or CREEPING FESCUE.

Botanical, *Festuca rubra*. German, *Rother Schwingel*. French, *Fétuque rouge*.

Perennial. Time of flowering, June and July. Height, 2 to 2½ feet.

This grass is of a remarkable creeping habit and endures severe droughts. Its roots penetrate so deeply into the soil that it remains fresh and green when other varieties are apparently dried up. It is particularly adapted for dry pastures by the seaside and on loose, light soils, the slopes of railroad cuts, etc., if dry. It yields an average bulk of herbage of fair quality, although most nutritious at time of flowering. Sow (if alone) 2½ bushels per acre; weight, about 14 lbs. per bushel. Price, 25 cts. per lb.; \$2.75 per bushel; \$18.00 per 100 lbs.



RED FESCUE

MEADOW FESCUE.

(English Blue Grass or Sweet Grass.)

Botanical, *Festuca pratensis*. German, *Wiesenschwingel*.

French, *Fétuque des prés*.

Perennial. Time of flowering, June and July. Height, 18 to 24 inches.



MEADOW FESCUE.

One of the very best of our natural grasses; very valuable for permanent pastures. It is highly nutritious and greedily eaten by all kinds of stock and is very fattening; makes excellent hay and succeeds well in almost all soils, although it does best in moist land. It is robust in habit and never grows in tufts, although it should be sown with other grasses. It is one of the earliest grasses in the spring and one of the latest in autumn, being particularly valuable for fall and winter pastures. In the climate of Virginia it often remains green under the snow through the winter, and in consequence is frequently called "Evergreen Grass." Sow (if alone) $2\frac{1}{2}$ bushels per acre; weight, about 22 lbs. per bushel. Price, 14c. per lb.; \$2.75 per bu.; \$12.00 per 100 lb.

ITALIAN RYE-GRASS.

Botanical, *Lolium italicum*. German, *Italienisches Raygras*.

French, *Ray-gras d'Italie*.

Biennial. Time of flowering, June or July. Height, 18 to 30 ins.

A variety unequalled for producing an abundance of nutritious feed in the early spring, as well as throughout the season, and it gives quick and successive growths until late in the fall, even if cut several times, providing the land is in good condition and not too dry. It is of succulent character and quickly responds to rich food and moisture. It thrives on almost any good soil, but reaches its most perfect state in moist, fertile land. As it is not perennial, it is not adapted for permanent pastures, but for one or two year's lay it is unsurpassed. Sow (if alone) 3 bushels per acre; weight about 18 lbs. per bushel. Price, 12c. per lb.; \$1.90 per bush.; \$10.00 per 100 lbs.



ITALIAN RYE-GRASS.

ENGLISH or PERENNIAL RYE-GRASS.

Botanical, *Lolium perenne*.

German, *Englisches Raygras*.

French, *Ray-grass Anglais*.

Perennial. Time of flowering, June. Height, 15 to 24 inches.

This grass is considered invaluable for permanent pastures. It produces an abundance of remarkably fine foliage, tillers out close to the ground and soon forms a compact sward. After being cut it grows up in a very short time and remains bright and green



ENGLISH RYE-GRASS.

throughout the season; it consequently is well adapted for lawn mixtures. It is also a good variety for hay if cut when in blossom, as it is then most nutritious; if cut much later it becomes woody. It flourishes best in situations not too dry or subject to droughts. Sow (if alone) $2\frac{1}{2}$ to 3 bushels per acre; weight per bushel, 24 lbs. Price (extra fine sample), 11 cts. per lb.; \$2.15 per bushel; \$8.00 per 100 lbs.

WOOD MEADOW GRASS.

Botanical, *Poa nemoralis*.

German, *Hainrispengras*.

French, *Paturin des bois*.

Perennial. Time of flowering, June. Height, $1\frac{1}{2}$ to 2 feet.

This grass is now classed among our good "Shaded Pasture" grasses, and furnishes a fine succulent and nutritive herbage which is very much relished by cattle. It is splendidly adapted for moist, shady places, and should be included in all mixtures for permanent pastures and lawns for moist soils. It is particularly valuable for lawns overshadowed by trees. It produces a much thicker growth than either *Poa pratensis* or *trivialis*. Sow (if alone) 2 bushels per acre; weight per bushel, about 14 lbs. Price, 40 cts. per lb.; \$5.00 per bushel; \$35.00 per 100 lbs.



WOOD MEADOW GRASS.

TIMOTHY OR HERD'S GRASS Of the North.

Botanical, *Phleum Pratense*. German, *Thimotée-Gras*.

French, *Fléole des prés*.

Perennial. Time of flowering, June and July. Height, 2 to 3 feet.

This luxuriates in moist, loamy soils, and sometimes, in favorable situations, attains a height of 4 feet, and even on light soils it yields fair crops. It is exceedingly nutritious, particularly when ripe, but as it is then very hard, it is better to cut it soon after flowering. It makes magnificent hay. On dry soils Timothy forms a bulbous swelling at the base of the stems from which the next year's growth starts. It is, therefore, highly injurious under such circumstances to pasture stock on the fall growth, as they trample and cut the leaves off that should protect it during the winter. Even in its most flourishing condition it is more or less injured by pasturing it. Sow (if alone) $\frac{1}{2}$ to 1 bushel per acre; weight per bushel, 45 lbs.

Price, Henderson's Standard Sample, 10 cts. per lb.; \$2.25 per bushel; \$5.00 per 100 lbs. (subject to change without notice).



TIMOTHY.

CRESTED DOGSTAIL. (Gold Grass.)

Botanical, *Cynodorus cristatus*. German, *Kammgras*.

French, *Crételle des prés*.

Perennial. Time of flowering, July. Height, 1 to 1½ feet.



CRESTED DOGSTAIL.

A fine, short grass that should enter into all permanent pasture mixtures, especially for dry, hard soils and hills pastured with sheep, as it is very hardy and but little affected by extremes of weather. Sheep fed in pastures where this abounds are less subject to foot rot. It is tender and nutritious and relished by all stock until it commences to ripen; it then becomes wiry. On account of its close growing habit, the dense turf it produces and its evergreen foliage, it is particularly desirable for lawn mixtures. Sow (if alone) $1\frac{1}{2}$ bushels per acre; weight about 21 lbs. per bushel. Price, 60 cts. per lb.; \$12.00 per bushel; \$55.00 per 100 lbs.

AUSTRALIAN SAND GRASS.

Botanical, *Zoysia pungens*.

Perennial. Time of flowering, July and August. Height, 1 foot.

A valuable introduction in grasses which we offer this year for the first time. It will grow in sand either inland or seacoast and make a compact turf. It forms a perfect network, effectually binding drifting sands. Sow 15 lbs. per acre; weight per bushel, 40 lbs. Price, \$2.25 per lb., \$200.00 per 100 lbs.

KENTUCKY BLUE GRASS.

Also called June Grass, Smooth Stalked Meadow Grass, Green Meadow Grass, and Spear Grass.

Botanical, *Poa pratensis*. German, *Wiesen Rispengras*. French, *Paturin des prés*.

Perennial. Time of flowering, June. Height, 10 to 15 inches.

This valuable grass is suited to a variety of soils, from an average dry one to moist meadows. It is exceedingly popular in most parts of the country as a pasture grass. It is very productive, unusually early, and presents a beautiful green appearance in early spring, while other grasses are yet dormant. It furnishes delicious food for all kinds of stock all through the season—unless there should be a protracted drought, which would cause it to slowly dry up—until the fall rains, when it springs forth and grows luxuriantly, and furnishes pasture until frozen up in winter.

In Kentucky and similar latitudes, when allowed its full fall growth, it makes fine winter pasture, and sheep, mules and horses will paw off the snow and get plenty to live on without other food. It makes a splendid lawn grass, forming a thick turf, and being of very even growth, producing only one flowering stem a year, while many other grasses continue to shoot up flower stalks throughout the season. Kentucky Blue Grass also makes hay of excellent quality, but the yield for this purpose is not equal to some other grasses. Sow (if alone) 3 bushels per acre; weight per bushel, 14 lbs. Price, *Extra Clean Seed*, 15 cts. per lb.; \$1.75 per bushel; \$12.00 per 100 lbs. *Fancy or Double Extra Clean Seed*, 20 cts. per lb.; \$2.60 per bushel; \$18.00 per 100 lbs.



KENTUCKY BLUE GRASS.

YELLOW OAT GRASS. (True.)

Botanical, *Avena flavescens*. German, *Goldhafer*.

French, *Avoine jaunâtre*.

Perennial. Time of flowering, July. Height, 18 inches.



YELLOW OAT GRASS.

Particularly adapted for dry meadows and pastures. Being of somewhat slow growth it should be sown with other grasses, and does well with Crested Dogstail and Sweet Vernal. It should be included in all permanent pasture mixtures for light, dry and calcareous soils. It is highly relished by cattle; comes very early and makes a very sweet hay, after which a large aftermath is produced. Sow (if alone) 3 bushels per acre; weight about 7 lbs. per bushel. Price, \$1.25 per lb.; \$8.50 per bushel; \$115.00 per 100 lbs.

Your Special Mixture of Grasses for Permanent Pasture has given entire satisfaction. No more Timothy for me.—CHARLES EVERDING, Branford, Conn.



WHITE CLOVER.

WHITE CLOVER.**Dutch or Honeysuckle Clover.**

Botanical, *Trifolium repens*. German, *Weissklee*. French, *Trèfle blanc*.

Perennial. Time of flowering, May to September. Height, 6 inches (creeping).

A very hardy creeping variety, which accommodates itself to a great variety of soils, but grows most luxuriantly in moist ground or in wet seasons. It is valuable in mixtures for permanent pastures and lawns, and also prevents the soils from being washed by heavy rains. Sow (if alone) 8 lbs. per acre; weight per bush., 60 lbs. (See cut.) Price, 22 cts. per lb., \$12.00 per bushel, \$20.00 per 100 lbs.

Mammoth or Pea Vine Red Clover.

(Perennial Red Clover, Cow Grass.)

Botanical, *Trifolium pratense perenne*. German, *Bullenklee*. French, *Trèfle vivace d'Angleterre*.

Perennial. Time of flowering, July. Height, 3 to 5 feet.

Quite distinct from the common Red Clover, and valuable for purposes for which the latter is entirely unsuited. It lasts for years and is adapted for longer lays. It produces a cutting crop two or three weeks later than common Red Clover, of very robust growth, yielding enormous bulk; it is very valuable for reclaiming exhausted lands. Sow (if alone) about 12 lbs. per acre; weight, 60 lbs. per bushel. Price, *Henderson's Standard Sample* (extra re-cleaned), 15 cts. per lb., \$8.00 per bushel, \$13.00 per 100 lbs.

YELLOW SUCKLING CLOVER.

Botanical, *Trifolium filiforme*. German, *Gelber fadenformiger Klee*. French, *Trèfle filiforme*.

Perennial. Time of flowering, May to July. Height, 6 in. (creeping).

A small trailing Yellow Clover, succeeding well on dry, gravelly or sandy soils. Stands the hot sun, and can be advantageously sown with mixtures for either lawns or permanent pastures for dry situations. Sow (if alone) 10 lbs. per acre. Price, 35 cts. per lb., \$19.50 per bushel, \$30.00 per 100 lbs.

WHITE BOKHARA. (Sweet Clover.)

Botanical, *Melilotus alba*. German, *Wunderklee*. French, *Trèfle de Bokhara*.

Biennial. Time of flowering, June to September. Height, 2 to 4 feet.

This is a tall shrubby plant, bearing quantities of small white flowers of delicious fragrance, and is exceedingly valuable as a pasture throughout the season for bees, and is also of great value to plow under as a fertilizer. It flourishes on poor soils and in exposed situations. Should be sown in the spring, and if expedient in drills 12 to 18 inches apart, requiring 10 lbs. per acre. Price, 35 cts. per lb., \$18.00 per bush., \$30.00 per 100 lbs.

CRIMSON OR SCARLET CLOVER.

(*Trifolium incarnatum*.)

The value of Scarlet Clover is now thoroughly established, and all lands from which crops have been harvested during the summer and fall should be sown with Scarlet Clover for plowing under the following spring. The quality of the hay and fodder is superior to that of Red Clover. It may be sown among corn, tomatoes, turnips, etc., at the time of last hoeing, or after potatoes, melons, cucumbers, etc., have been harvested, or on grain stubble and harrowed in. In the latitude of New York time of sowing may extend from July 15th to September 15th. Sow 15 lbs. per acre. Choice American-grown seed, 10 cts. per lb., \$5.00 per bushel, \$8.00 per 100 lbs.

CLOVERS.

Clovers are one of the most important factors to success in Agriculture. They exhaust the soil less than any other class of plants giving equal bulk; they get much sustenance from the atmosphere, and actually add to the fertility of the land.

RED CLOVER. (Common or Medium Clover, June Clover.)

Botanical, *Trifolium pratense*. German, *Kopfklee, roth blühender*. French, *Trèfle rouge*.

This is by far the most important of the Clover family for practical agriculture. It grows luxuriantly in stiff loams, and is fond of lime, though it adapts itself to a variety of soils. In the Northern States it is generally sown in the spring, and in a short time yields abundantly. Sow (if alone) 12 to 14 lbs. per acre. If sown in spring after Timothy, 6 to 8 lbs. per acre. Price, *Henderson's Standard Sample* (extra re-cleaned), 14 cts. per lb., \$7.25 per bushel, \$12.00 per 100 lbs.

ALSIKE OR HYBRID CLOVER.

(SWEDISH CLOVER.)

Botanical, *Trifolium hybridum*. German, *Bastard Klee*. French, *Trèfle hybride*.

Perennial. Time of flowering, July and August. Height, 9 to 18 inches.

This is one of the hardiest of all the Clovers. It succeeds on any soil, and resists extremes of drought and wet. It yields enormously, and can be cut several times in a season; is very nutritious, and is good for either green food, pasturing or cured for hay. It is valuable for sowing with other grasses and clovers, as it forms a thick bottom, and increases the yield of hay. Alsike Clover frequently produces heavy crops on soils that have become "clover sick," and where no other clovers will succeed. Sow (if alone) 8 lbs. per acre; weight, 60 lbs. per bushel. 18c. lb., \$10.00 bushel, \$16.00 per 100 lbs.

YELLOW TREFOIL CLOVER.

(Hop Clover, Nonsuch or Black Medick.)

Botanical, *Medicago lupulina*. German, *Gelb-Hopfenklee*. French, *Minette jaune*.

Biennial. Time of flowering, May to August. Height, 8 to 15 inches.

An excellent variety for sheep pastures, either alone or with other grasses. It thrives on dry, inferior soils; starts very early in the spring; valuable for one or two years' lay. Very productive and grows rapidly. Sow (if alone) 15 lbs. per acre. 20c. per lb., \$10.00 per bushel, \$16.00 per 100 lbs.



COW GRASS, MAMMOTH OR PEA VINE CLOVER.



CRIMSON CLOVER.

GRASSES for the SOUTH & WEST

"GRASS IS KING."

TEXAS BLUE GRASS. (*Poa Arachnifera*.)

This is an invaluable hardy winter Grass for the South, and the longest, driest and hottest summer fails to injure it. It makes as good sod as the Kentucky Blue Grass (*Poa Pratensis*), and if sown together (not too deep) the seeds of the two varieties generally come up together after the same shower, for it takes a wet, damp, drizzly spell to start it. It can be cultivated from both seed and sets, and either may be planted in the fall or spring, though the fall is preferable. The seeds are of a woolly, webby nature, and hitherto this condition has greatly retarded its cultivation from seed, but one of our correspondents has overcome this, and has favored us with details of his method of parting and sowing the seed. This has been put together by us in the shape of a pamphlet, a copy of which we will send free with all orders. The sets should be planted at any time between the fall and the end of February, after plowing, in rows $2\frac{1}{2}$ feet apart, and 10 to 12 inches between the plants (about 20,000 sets to the acre). They will soon seed and spread, and form a compact turf of the highest value. Parties ordering should be careful to state Texas Blue Grass, so as not to confound it with Kentucky Blue Grass.

PRICE.—20 cts. per packet; 40 cts. per oz.; \$1.00 per $\frac{1}{4}$ lb.; \$3.00 per lb.; \$250.00 per 100 lbs.

AWNLESS BROME GRASS. (*Bromus inermis*.)

Is thoroughly permanent, grows with wonderful rapidity, produces heavy hay crops and luxuriant pasture, and will stand the longest drought of all forage plants, and is equally good for cutting green, pasturing or curing into hay. It will grow on gravelly clay, fresh marl, and even on yellow sand, although, of course, on this it does not produce so abundantly, but even under these less favorable conditions it gives a very large yield.

It has also proved to be one of the hardest grasses known, standing the severe winters of Canada and the Northwest, and we believe it will succeed in a wider range of temperature than any other grass.

Price, 20 cts. lb.; \$2.50 bushel of 14 lbs.; \$16.00 per 100 lbs.

BERMUDA GRASS. (*Cynodon Dactylon*.)

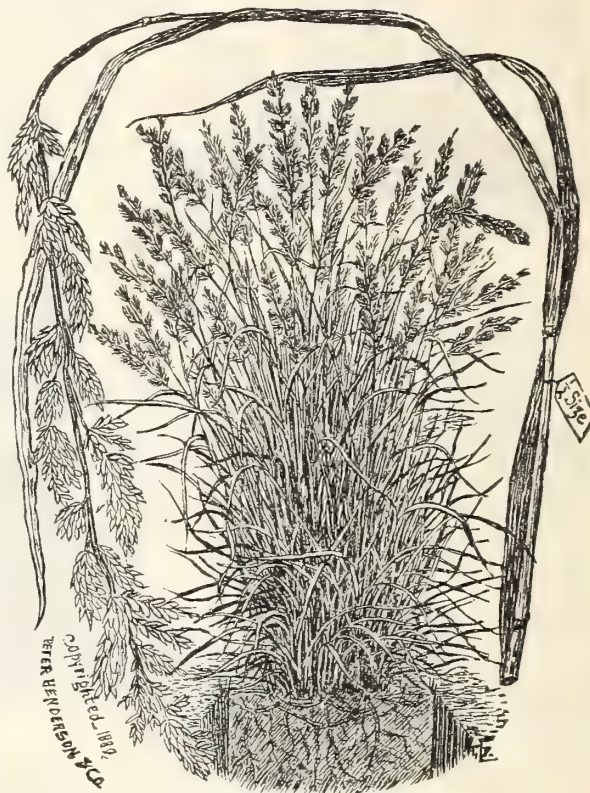
This is a grass that is eminently adapted for the Southern States, as it is fitted by nature to withstand drought and the scorching rays of the sun better than any other variety that we know of. Hitherto, the great difficulty in extending the cultivation of this Southern Grass has been that it has had to be propagated for the most part by sets, which is always a tardy operation, but this is now a thing of the past. We have been ransacking the universe for several years for a spot where a plentiful supply of good germinating seed of this grass can be grown, and have at last

found one, so that those who have been waiting for good germinating seed of the true variety of Bermuda Grass need wait no longer. Who can estimate the boon this will be to the South? It will be simply invaluable. When once sown and partly established, it will propagate itself. In all tropical countries, this grass is highly esteemed for its drought-resisting qualities, and also for the peculiar habit of its growth; the wiry roots of the grass in running over the surface of the ground form a strong fibrous matting. It has numerous joints, from each of which roots strike down and blades shoot up. This

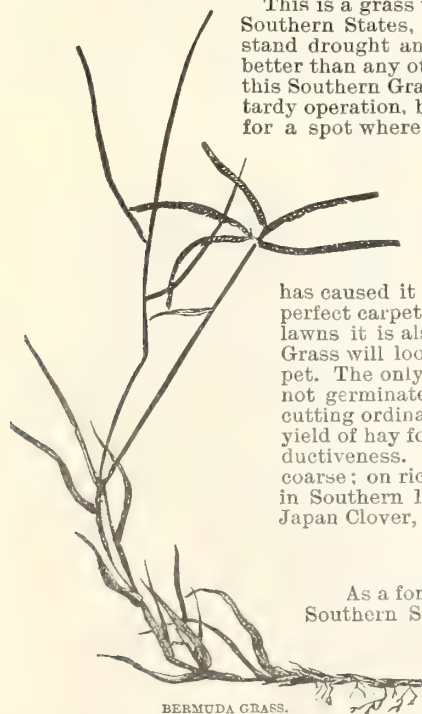
has caused it to be sown largely for the purpose of binding banks of creeks and dams, etc. It makes a perfect carpet of roots, enabling it to withstand traffic which would completely kill any other grass. For lawns it is also highly prized, as while all other grasses are burned up during the hot season, Bermuda Grass will look comparatively green, and if watered and regularly mown, it will make quite a velvety carpet. The only drawback is that in winter it looks a little brown. It should be sown in the spring, as it will not germinate until warm weather comes. As a grass for hay or pasture, it matures and gives its first cutting ordinarily in June. Persons having the most experience with Bermuda Grass, place the average yield of hay for ten years at four tons per acre per annum. This is a cautious and safe estimate of its productiveness. It grows wherever corn and cotton grow. On poor land Bermuda Grass is stumpy and coarse; on rich land its growth is free, and its blades are long, tender and delicate. Properly cultivated in Southern latitudes, animals prefer this grass and the hay made from it over all other varieties. Like Japan Clover, it does not succeed further north than Virginia. Price of Seed, \$1.25 lb.; 100 lbs., \$1.10 lb.

SORGHUM HALAPENSE. (Johnson Grass.)

As a forage plant, this grass has proved to be of the greatest value in Alabama and other of the large Southern States. It will grow on any land where corn will grow, and, in the opinion of so well-known an authority as Wm. Saunders, of the Department of Agriculture at Washington, is looked upon as having the greatest prospective value. In Alabama they make three cuttings of it yearly, and from the returns average five tons of hay per acre. This is grown on good bottom land, and all the cultivation it receives is to plow it down once in three years and then give it a very thorough harrowing, when an increased crop ensues. The best stage at which to cut for hay is when the grass comes into bloom, when it will be from 24 to 30 inches high. It is then very tender, and far more nutritious than sweet corn. All kinds of stock are fond of it. It is of perennial growth and takes firm hold of the soil, and spreads rapidly. Seeds of this grass should be sown alone, in well-prepared ground, from August to October 15th, sowing broadcast one bushel extra clean seed to the acre. Price, 20 cts. lb.; bushel of 25 lbs., \$3.50; 100 lbs., \$12.00.



TEXAS BLUE GRASS.



BERMUDA GRASS.

Clovers for the South.

ALFALFA OR LUCERNE.

(*Medicago sativa*.)

This has been a favorite forage plant in some parts of the Old World for hundreds of years, where soils and climates are adapted to it, and is considered indispensable.

It is remarkable that Alfalfa has not come into more general cultivation in our Southern States, and other sections suitable to it, for it is of inestimable value, particularly in localities subject to protracted droughts. The late senior member of our firm, Mr. Peter Henderson, after a visit through the South, stated: "I was much impressed with the utter dearth of forage plants in some localities, and the consequent starved looking cattle, and to my inquiries as to the cause, the reply was always, 'No good grass or clover can be found to stand the heat and drought of our long summers.' Fortunately, in alluding to the subject to a gentleman in St. Augustine, Fla., I was shown a practical solution of the difficulty by being taken to a patch of Alfalfa only $\frac{1}{10}$ of an acre in extent—which had fed a cow during the summer months, which produced as fine milk and butter as could be got North. The land on which this was grown was identical with thousands of acres in the immediate vicinity which was given over to Scrubby Pine and Blue Palmetto."

The great value of Alfalfa is in its enormous yield of sweet and nutritious forage, which is highly relished by stock either when green or cured into hay. It will grow and yield abundantly in hot, dry sections, and on poor, light and sandy land, where no other grasses can be grown, for it sends its roots down to enormous depths, they having been found in sandy soil 13 feet long; consequently it consumes food, moisture and the leach of fertilizers, which have been for years beyond the reach of ordinary plants.

Alfalfa greatly enriches the soil, even more than ordinary Clovers, as it derives a very large portion of nutritive material from the atmosphere. It aerates the land to a great depth, and a large portion of its great fleshy roots, equalling small carrots in size, annually decay from the outside and keep growing larger from the centre, and are constantly increasing the fertility of the ground.

Alfalfa is not considered perfectly hardy in our more Northern States, yet experiments made by some of our Northern Agricultural Experimental Stations prove it of more value North than previously supposed.

The Great Yield.—Because Alfalfa flourishes on poor and worn-out lands, it should not be thought unadapted to good soils. In the latter, its yield almost exceeds belief. At the New Jersey



ALFALFA OR LUCERNE.

State Farm seed of it was sown April 28th, in drills and the plants cultivated, and it had grown 40 inches tall, and when cut on July 7th, 70 days from sowing, yielded (green) $7\frac{3}{10}$ tons per acre; the second cutting, made on August 18th, yielded (green) $8\frac{1}{10}$ tons per acre; the third cutting was made September 27th, and yielded (green) $4\frac{8}{10}$ tons per acre; a total of 20 tons of green fodder per acre the first year sown, which would equal at least 5 tons of cured hay. If sown on light, dry soils during a dry spell, or if sown broadcast, not much, if any, crop can be expected the first year, as the roots have to get a vigorous hold of the soil; the second year it can (if sown under such conditions) be cut two or three times, but it is not until the third year that it develops into full vigor, and after that it yields magnificent crops for 10 or 15 years.

Alfalfa will not flourish on land where water stands a short distance below the surface, nor in heavy, sticky clays. It attains its highest perfection on mellow, well-drained or rolling land where water readily passes away.

Sow (in drills) 12 lbs. per acre. Price per lb., 16c.; \$9.00 per bushel; \$14.00 per 100 lbs.

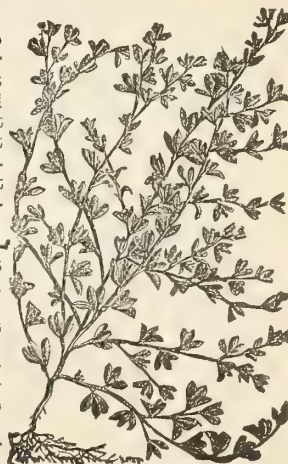
sections, it should be sown with half crop of barley or other grain to shade it from the hot sun for the first summer. It will crop from seven to ten years, according to the nature of the soil. Its duration, however, may be greatly increased by judicious top-dressing. Price, 15 cts. per lb.; \$2.00 per bushel of 20 lbs.; \$10.00 per 100 lbs.

JAPAN CLOVER.

(*Lespedeza striata*.)

A low spreading perennial, allied to the clovers, much like white clover in habit, and lasting for years. It flourishes on the poorest soils, and is also excellent for preventing it from washing by heavy rains; it withstands extreme drought, furnishing good grazing, even in dry, hot weather. For a sheep pasture it is excellent and very nutritious. Valuable in the South for sowing on poor, worn-out fields where other grass will not thrive, growing from 4 to 12 inches high according to the fertility of the land. It fertilizes the soil by the decay of its stubble, as clover does, or by turning under as green manure. Japan Clover is not hardy north of Virginia. Sow (if alone) 14 lbs. per acre; weight, 20 lbs. per bushel.

Price, \$5.50 per bushel; 30 cents per lb.; \$25.00 per 100 lbs.



JAPAN CLOVER.



SAINFOIN OR ESPARSETTE.

SAINFOIN.

(*Onobrychis sativa*, Esparsette, French Grass, Holy Hay.)

Root perennial. Time of flowering, June and July. Height, 2 to 3 feet.

An excellent fodder plant, particularly for southern and western sections, for light, dry, sandy, gravelly, limestone or chalky soils. It flourishes during long droughts, owing to its long descending tap roots, which have been found 16 feet long. It succeeds where many other grasses will not. In some parts of France and England it has been grown for years, and is without doubt a most important forage plant for calcareous districts in any country. It is very nutritious, and when fed to milch cows it improves the quality of the milk and may be given without producing "hoove." The quality of fodder more than compensates for the slight deficiency in quantity. The seeds are more nutritious than oats, and are eagerly eaten by fowls, causing them to lay. It may be sown either broadcast or drilled, but the former is preferred. The seeds are large, and require to be covered deeper than those of clover or almost any other agricultural seed. If sown broadcast, it will require five to six bushels per acre; if drilled, four to five bushels. In dry

MILLET.

(Prices subject to variation.)



PEARL MILLET.

GERMAN OR GOLDEN MILLET.

(*Panicum Miliaceum*, var. *Aureum*.) An improved variety, medium early, growing three to five feet high. No

other grass anywhere near approaches its enormous yield when grown under favorable circumstances. The heads are closely condensed, and the spikes are very numerous. The seeds round, golden yellow, and beautiful in appearance, and contained in rough, bristly sheaths. Our seed is pure and Southern grown, and yields much heavier crops than degenerate Northern and Western grown. Price, 10c. per lb.; \$1.75 per bushel; \$3.50 per 100 lbs.

HUNGARIAN MILLET OR HUNGARIAN GRASS.

(*Panicum Germanicum*.) This species grows less rank, with smaller stalks. Its leaves are very succulent and it furnishes an abundance of green fodder, often yielding two or three tons of hay per acre. It is very popular and valuable with those who are clearing timber lands. (See cut.) Price, 10c. per lb.; \$1.60 per bushel; \$3.10 per 100 lbs.

Golden and Hungarian Millet are excellent catch crops for sowing during the summer, and are especially valuable in seasons of short hay crop. They cure into excellent hay if cut when in blossom; if allowed to ripen they become too woody.

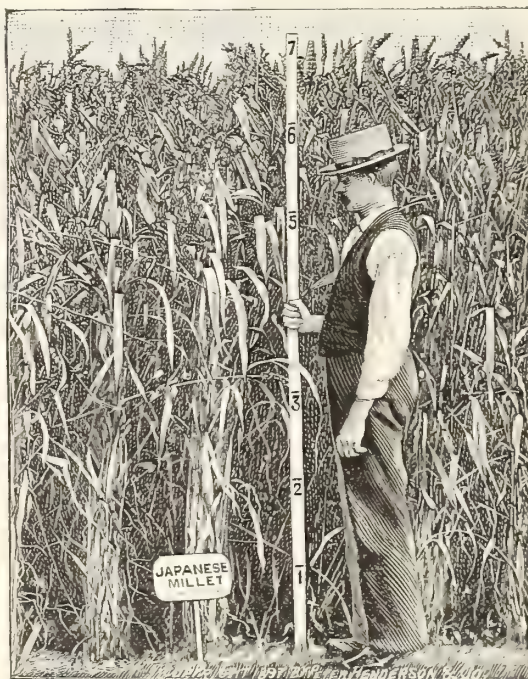
The Hungarian is the earlier, but the selected stock of German we offer will produce a larger though somewhat coarser crop.

PEARL MILLET. (*Pennisetum Spicatum*.) This has been cultivated for some years in some of the Southern States under the names of African Cane, Egyptian Millet, Japan Millet, Cat-tail Millet, and Horse Millet. It grows with tropical luxuriance in strong loamy soil, particularly if well enriched, and then attains a height of from 7 to 9 feet, and produces an enormous quantity of green fodder, for which purpose it can be cut several times during the season, as it immediately starts a new growth after cutting, and grows with great rapidity. It will prove of exceptional value if grown in sections subject to protracted droughts, where natural grasses dry up, as it will keep on growing, though of course not so luxuriantly. It is best sown in drills 20 inches apart, in beds 12 feet wide, leaving an alleyway 6 feet wide between the beds, so that there will be space enough to cure the fodder on an extemporized fence. (See cut.)

Sow in drills, 5 to 6 lbs. per acre; if broadcast, 8 lbs. per acre. Weight per bushel, 56 lbs. Price of *Clean Seed*, 20c. per lb., or by mail, 30c. per lb.; \$14.00 per 100 lbs.

JAPANESE MILLET. Entirely distinct from any other millet, grows tall and produces an enormous crop. It may be sown from the middle of May to the 1st of July, broadcast, at the rate of 15 lbs. per acre, but it is better to sow it in drills, 12 to 18 inches apart, using 10 to 12 lbs. per acre, and hoed between the rows to keep down all weeds until the plant attains a height of 12 to 18 inches, when its rapid growth will smother all weeds. It grows 6 to 8 feet high, stands remarkably well notwithstanding its great height, and yields from 10 to 12 tons green fodder per acre. When cured it makes an excellent quality of hay, and its feeding value is far superior to corn fodder, and it is much relished by all kinds of stock, whether green or cured. If to be made into hay, cure as you would a heavy crop of clover. The seed is easily threshed and is the best of the millets for poultry feed. It is very highly recommended by the Massachusetts Experiment Station, where it has been given an exhaustive trial, and they report that milch cows which had been fed on corn immediately increased in flow of milk when put on Japanese Millet, and fell back to their former standard when again fed on corn, and cows with both before them always took the Millet first, consuming it without waste, while they were apt to leave a part of the stalks of the corn. An ideal ensilage mixture may be composed of two parts of this millet to one part of soja beans (see page 24), with a few sunflower heads added. The soja beans

and sunflower supply the albuminoids and fat in which the Corn is deficient. This mixture forms a complete balanced ration for milch cows without the addition of grain, though it is, of course, advisable to feed grain occasionally as a change. This Millet does not endure drought well, except it be sown early in retentive soil, and it is not adapted to the climate, nor is it recommended for the Southern States; but north of Washington, and especially for good, rich soils, we confidently recommend its general cultivation. It will produce a fair second cutting if sown early in May and cut when in blossom. (See cut.) Price, 20c. lb.; 10 lbs. \$1.60; 100 lbs. \$12.00.



JAPANESE MILLET.



HUNGARIAN MILLET.



SORGHUMS.



TEOSINTE. (*Reana Luxurians.*) A semi-tropical forage plant, considered by many to be superior to Sorghum or Millo Maize. The plant resembles Indian Corn, but is more compact and slender. It suckers more than any other forage plant, and produces 3 to 4 cuttings of good fodder during the summer. There has hitherto been great difficulty in getting seed that will grow, and this has retarded its cultivation. Our tests of Teosinte last year showed an average germination of 90%, and there is no reason to fear that this cannot be kept up. \$1.50 lb.; 100 lbs., \$125.00.

RURAL BRANCHING DOURA. (*Millo Maize, Sorghum Vulgare.*) A wonderfully productive fodder plant that has been thoroughly tried, and is seemingly superior to all others for soiling, silos, and green or dry fodder. It has great capacity for standing drought, and can be cut at any stage, or cured for fodder. It shoots out strongly, 6 to 16 stalks are frequently produced from one seed, and it starts a new growth rapidly after being cut for fodder, makes a great amount of foliage, and can be cut for green feed several times in the season. Plant and cultivate in the same manner as corn. 4 to 5 pounds required to plant an acre. 20c. lb.; 100 lbs., \$10.00.

YELLOW BRANCHING DOURA. (*Yellow Millo Maize.*) This is earlier than the Rural Branching, and of taller growth, often attaining a height of 9 to 12 feet, but it does not stool out quite as much from the ground, although it branches out from the joints. Its seed heads grow very large and heavy on good ground, and when ripe hang over, and the grains are large and plump, and double the size of the Millo Maize, and are of a deep golden color. It produces an enormous quantity of green fodder, for which stock show a marked partiality. Cultivate same as corn; plant 4 lbs. to the acre. 20c. lb.; 100 lbs., \$10.00.

SUGAR CANE.

Besides being grown for syrup, the sugar canes are valuable fodder plants for cutting green and feeding to stock during dry, hot weather in summer when pastures are apt to be burned up. Being a tropical plant it makes its best growth during just such weather, so that a few acres should be grown on every farm of any extent. Cattle, horses and sheep relish and eat it greedily, and it may be fed to them with safety. It should be sown in drills, using 10 or 12 lbs. per acre, or broadcast at the rate of 20 to 25 lbs. per acre, and should be cut when about 20 inches in height, and will yield several such cuttings during the summer. It pays to manure it heavily, for the oftener it is cut the more it suckers out and seems to grow more rapidly.



EARLY AMBER SUGAR CANE.

EARLY AMBER SUGAR CANE. A variety which has been largely tested in many parts of the country with great success. Being of somewhat slim growth, it does not stand droughts of the South as well as the Early Orange, but for growing North it is unsurpassed. It is exceedingly early and makes the finest quality of syrup and sugar. (See cut.) 15c. lb.; 100 lbs., \$6.00.

EARLY ORANGE SUGAR CANE. Yields about twenty-five per cent. more cane, and is also much more succulent than any other variety. The stalks are much heavier, but not quite so tall, and it is a little later than the Amber, and is better adapted for culture in the South. It does not succeed well north of 43 degrees. 15c. lb.; 100 lbs., \$6.00.

RED KAFFIR

CORN. This very leafy and juicy variety is taller but more slender than the white. The seed is red and smaller than that of the white, and rather hard and brittle, but is excellent for feeding poultry. It ripens a little earlier than the white variety and yields much heavier, and is the best drought resister among all the non-saccharine Sorghums. It is also valuable for sowing on poor land, as it will give better results under these conditions than the White Kaffir Corn, as well as other Sorghums, most of which require a well-enriched soil. Unless under exceptional circumstances we do not recommend the Kaffir Corns north of New York City, but they are worthy of extended culture in the Southern States, where they will yield two cuttings in a season, as well as 40 to 50 bushels of grain. 15c. lb.; 100 lbs., \$10.00.



KAFFIR CORN.

WHITE KAFFIR CORN. Grows four to five feet high, making a straight, upright growth. It has a strong stem with numerous wide leaves. The stalks keep green and juicy and do not harden like other varieties of Sorghum, and it makes an excellent fodder, either green or dried, which is highly relished by all kinds of stock. It should be sown in drills three feet apart. If the grain is desired for poultry feed, it should be sown in rows three feet apart, using five pounds of seed to the acre; but, if desired for fodder, it can be sown either broadcast or in drills, using twenty to twenty-five pounds per acre. Flour made from the seed is excellent for making cakes, muffins and pastry, and has a slightly sweetish taste; otherwise it is not distinguishable from wheat. Unlike Corn, both the Red and White Kaffir Corn have the very desirable quality of remaining green after the grain matures, until killed by frost. (See cut.) 15c. lb.; 100 lbs., \$10.00.

BROOM CORN, EVERGREEN. This variety is of great value from the fact that it is entirely free from all crooked brush, and it does not get red in the field before it is cut, but remains strictly green, and consequently always commands the highest market price. 15c. lb.; 100 lbs., \$7.50.

JERUSALEM CORN. Grows about three feet high, and is claimed to be one of the surest crops for dry countries and seasons. It is a non-saccharine Sorghum, and yields a large crop of pure white grains, which, when ground, are exceedingly nutritious and fattening for hogs. At the United States Grass and Forage Experiment Station, located in an arid section of Kansas, where the Department of Agriculture has for several years past conducted a series of valuable experiments to determine the best drought-resisting plants, Jerusalem Corn proved to be one of the most desirable, having in the driest season in the past 15 years produced a crop, without irrigation, both of fodder and grain, when other forage plants perished, and excels in drought-resisting qualities even the Kaffir Corns and Douras. It also makes an excellent hominy. Five pounds will plant an acre. 20c. lb.; 100 lbs., \$12.00.

EARLY BUTLER DENT CORN.

The Earliest Dent Corn.

This new variety is a cross from Pride of the North and has the smallest cob of any Dent Corn in cultivation. It is also the very earliest Dent Corn and is very profitable to grow. By actual test 70 lbs. of ears have shelled out 64½ lbs. of shelled corn, leaving only 5½ lbs. of cobs. It is just the corn for northern farmers, as it will ripen farther north than any other of its class. It grows quick, rank, strong, has small cobs, very long grains, and good-sized ears of a beautiful yellow color.

15 cts. per quart; 50 cts. per peck; \$1.75 per bushel.

crop north of Pennsylvania, although the past season it made a fine crop on Long Island. The ears are uniformly well filled out, and it will make more shelled corn to a given bulk of ears than any other variety. 15 cts. per quart; 50 cts. per peck; \$1.75 per bushel.

GOLDEN BEAUTY.—This new corn has given most excellent satisfaction. At the Pennsylvania State Fair it was awarded first prize. It is exceedingly productive; a large proportion of the stalks produce two fine ears. It is undoubtedly the largest grain and handsomest yellow corn. The ears are of perfect shape, with from ten to fourteen rows, and filled out completely to the extreme end of cob. The cobs are unusually small. The richness of color and fine quality of grain make it very superior for grinding into meal. Grows 8 to 10 feet high, and matures early and surpasses all varieties of the Golden Dent in size and beauty of grain and immense productiveness. In 1885, one farmer in Connecticut raised 158½ bushels shelled corn on one acre, and another in Pennsylvania, 117 46-56 bushels. (See cut.) 15 cts. per quart; 50 cts. per peck \$1.75 per bushel.

QUEEN OF THE PRAIRIE.

(Pride of the North.) (Early Golden Dent.) This variety is valuable to grow North, as it matures early. Planted as late as July 4th, it has fully matured by October 1st. The ears grow 8 to 10 inches in length, from 14 to 16 rows, slightly tapering. The kernels are closely set together on the cob, of a light orange color at the outer end, darker in color lower, and makes excellent meal. The stalks usually grow 6 to 8 feet in height, producing one or two good ears each. It takes a firm hold on the soil. 15 cts. per quart; 50 cents per peck; \$1.75 per bushel.

FARMERS' FAVORITE—Ripens early and hence succeeds where many varieties will not mature. Produces unusually well, even on light land. With ordinary cultivation it frequently yields ninety to one hundred bushels of shelled corn per acre. The ears are of large size; small, red cobs, well filled out to the end, with large deep grains, of a most beautiful, bright, golden-yellow color. Grows about 8 to 10 feet high. 15 cts. per quart; 50 cts. per peck; \$1.75 per bushel.

FIELD CORNS, Dent Varieties.

If wanted by mail add 15 cts. per quart for postage. Corn planted in hills requires eight to ten quarts per acre.

HICKORY KING CORN.—This new white field corn is entirely distinct and has the largest grains with the smallest cob of any white corn. So large are the grains and so extremely small the cob that a single grain almost completely covers the cob section. The stalks, of strong, vigorous growth, generally bear two good ears each, and occasionally three. It yields splendid crops even on light soil, and is undoubtedly the best and most productive white field corn, particularly for the south. It is not, however, considered a safe

Corn.

LEAMING.

Ears are of good size, set low down, and nearly always grow two to each stalk. Very small, red cob, with a deep, long grain, of a rich golden color. It withstands severe drought, attributable to its earliness in maturing, strong and vigorous growth, and its stocky nature. It matures reasonably early, and if planted by the first of June, will generally ripen, and be fit to husk and crib early in September. Has yielded one hundred bushels per acre.

15 cents per quart; 50 cents per peck; \$1.75 per bushel.

MAMMOTH WHITE SURPRISE.

A new sort with large ears and very small cob. The ears are from 12 to 14 inches long, with from 14 to 28 rows of very large, deep grains. Very productive. Said to yield from 75 to 125 bushels of shelled corn per acre, according to soil and season. Specially adapted to sections from Pennsylvania south. 15 cts. per quart; 50 cts. per peck; \$1.75 per bushel.

CHESTER COUNTY MAMMOTH.

One of the largest varieties of field corn in cultivation; will outyield every other variety of yellow field corn, excepting Golden Beauty. Under good cultivation it averages 100 to 140 bushels of shelled corn per acre. The ears are very large, containing 14

to 32 rows of medium-sized yellow grains, very sweet and nutritious. It furnishes a large amount of fodder, growing 12 to 16 feet high. It is, undoubtedly, one of the best yellow field varieties for rich land in this latitude or the South. 15 cts. per qt.; 50 cts. per peck; \$1.75 per bushel.

EARLY MASTODON DENT CORN.

The Earliest LARGE Dent Corn.

Produces large ears for an early variety. It grows strong at a medium height, with broad, heavy leaves, and makes the finest shelled corn in appearance of any, being purely Dent, of two shades of white and yellow. We can recommend the Mastodon as being one of the best large-eared early corns in existence. Being early, it can be used far north, where many other varieties would not mature. Within eight miles of Lake Erie this corn ripened within ninety to one hundred days.

15 cts. per quart; 50 cts. per peck; \$1.75 per bushel.

All the above varieties in 10-bushel lots, \$1.60 per bushel.

FIELD CORNS, Flint Varieties.

CORN.

KING PHILIP.

Coppery red. Very early. This is one of the oldest and best known of the flint varieties. Usually matures three months after planting. Ears large sized and handsome, measuring 10 to 12 inches long. 15 cts. per qt.; 50 cts. per peck; \$1.75 bushel.

POP CORNS.

White Pearl. Smooth grained ears, 4 to 5 ins. long, by $\frac{7}{8}$ to $1\frac{1}{8}$ ins. diameter, good for either family or market use. Price, \$8.00 for 100 lbs.; 10 cts. per single lb., or by mail 20 cts. per lb.

EARLY AMBER RICE. A new and distinct shade of color, it matures very early and is in every respect a first-class pop corn. Price, \$18.00 per 100 lbs.; single lb., 20 cts., or by mail, 30 cts.

WHITE RICE. (Rat Tooth.) A very fine white variety, ears 4 to 5 inches in length, and 1 to $1\frac{1}{2}$ in diameter. Kernel pointed. Especially salable among the retail grocers. Price, per 100 lbs., \$8.00; per lb., 10c.; by mail, 20c.

FODDER CORN.

Is not grown nearly so much as it should be, and it would pay farmers, instead of growing so much cheap grain, to turn their attention to stock and thereby not only make as much money but improve the fertility of the farm. Corn is, undoubtedly, the best of the plants for the silo, and in these days of sharp competition in the dairy business, no dairy, whether for milk or butter, can be profitably run without an abundance of ensilage. Every year the testimony becomes stronger that fodder corn should not be sown broadcast. It may be planted in hills, but the largest crops can be raised by planting in rows about three feet apart and thoroughly cultivated. The corn should, if possible, reach the glazing stage, as in that condition it makes a better quality of ensilage. In the North, Early Mastodon is one of the best for ensilage (see page 18), being early, large, and ears well. Further south, the Southern Horse Tooth and Improved Early Horse Tooth produce the largest crops and are the most satisfactory. Recent experiments have shown that ensilage composed of two parts of well-eared corn fodder and one part of Early Soja beans (see page 24), with a few sunflower heads chopped up and added, is a complete balanced ration for milch cows, and we recommend every dairyman in the country to try this combination, feeling confident that they will find it a boon.

SWEET FODDER CORN. For cutting green for fodder and for soiling. This is better than any field corn, from the fact that it is so very sweet and nutritious that cattle will eat every part of the stalk and leaves with relish. Drill thickly, in rows three feet apart, using $1\frac{1}{2}$ bushels of seed per acre. \$2.00 bushel; 10-bushel lots, \$1.80 bushel.

SOUTHERN HORSE TOOTH. Grows to a large size, is very leafy and well adapted for ensilage. Large quantities of this corn are sold by feed and other stores which usually result in disappointment to the farmer. There is no corn more difficult to cure or keep properly, and much of it is kiln-dried, while large quantities have been stored in elevators and gone through a sweating process which has destroyed the germ. The stock we offer is carefully selected and sun-dried and of high germination. Price, \$1.35 bushel; 10-bushel lots, \$1.25 bushel.

IMPROVED EARLY HORSE TOOTH. Being nearly two weeks earlier, this variety is better adapted for fodder and ensilage in the Northern States than the ordinary Southern Horse Tooth. \$1.40 bushel; 10-bushel lots, \$1.35 bushel.

LONGFELLOW.—A large 8-rowed yellow flint variety well adapted for the Northern States.

This fine field corn is the result of careful selection in a family of Massachusetts farmers for 45 years. The ears are remarkably long (see cut), some of them measuring fifteen ins., and oftentimes two or more good specimens grow on one stalk. Grain large and broad and yellow. The cob is quite small. It is the largest variety of yellow field corn safe to plant in the latitude of Massachusetts, where it is quite extensively grown. One grower reports 115 bushels shelled corn from an acre.

This is the variety that took the first premium among the flint corns at the great exhibition at Chicago a couple of years ago.

15 cents per quart;
50 cts. per peck; \$1.75 per bushel.

COMPTON'S EARLY.—The earliest known yellow flint variety, ripening in from 76 to 85 days. It is a handsome 10 and 12 rowed sort, very productive, and will ripen in the Northern States. Ears 10 to 12 inches long. Stalks 8 to 10 feet in height. Ears well filled. 15 cts. per qt.; 50 cts. per pk.; \$1.75 bush.

LARGE WHITE FLINT.—Handsome ears, large and well filled, kernels white and of fine quality. A productive and first-class sort. 15 cts. per quart; 50 cts. per peck; \$1.75 bushel.

LARGE YELLOW FLINT.—(Early Canada Yellow.) Similar to the above excepting in color; largely grown in the extreme north; matures in about 90 days. 15 cts. per quart; 50 cts. per peck; \$1.75 bushel.

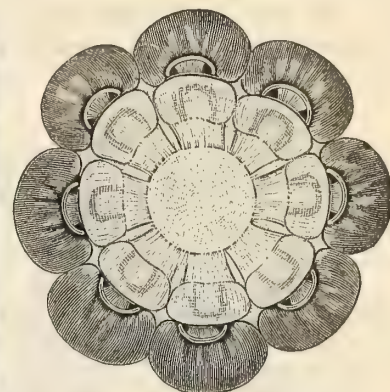
GOLDEN DEW-DROP.—It is a most reliable flint variety for northern planting, as it grows quickly and matures early; is eight-rowed, looks a little like the Canada Yellow, but the grain is brighter in color. Cob white and very small. (See cut.) As a rule, the flint varieties are not as good yielders as the dent sorts, but the Golden Dew-drop produces two or three ears to the stalk. The stalks will average 6 feet in height. 15 cts. per qt.; 50 cts. per pk.; \$1.75 bush.

BUY CORN

for Feed.

BUY
SEED
CORN

for
Seed.



GOLDEN DEW DROP.

COMPTON'S EARLY
(FLINT) CORN.

CHOICE SEED OATS. SELECTED

All our Oats are specially grown from selected stock for seed purposes.



AMERICAN-GROWN CLYDESDALE OATS.

BRITISH (Imported) OATS.

We offer the following standard British varieties:

HENDERSON'S CLYDESDALE. Without a doubt the grandest White Oat in cultivation, weighing 50 lbs. to the bushel; very early and productive. We offer these oats for sale at the **weight of 50 lbs. per bushel**, exactly as grown for us, so that those purchasing will actually receive for every bushel **over one and one-half bushels** according to the American standard. **\$1.00 peck, \$2.50 bushel of 50 lbs., 3 bushels for \$7.00, 10 bushels and upward, \$2.25 per bush.; 100 bushels and upward, \$2.15 per bushel.**

In the "Ohio Farmer," Mr. J. T. Hickman, of the Ohio Agricultural Experiment Station, states that samples of Henderson's Clydesdale Oats and Clydesdale Oats procured from other sources have shown, in a series of experiments, in favor of Henderson's Clydesdale. He also states that the average yield of Clydesdale Oats procured from other sources was something like nine bushels per acre below the results obtained from Henderson's Clydesdale.

The bushel of Clydesdale Oats purchased from you last year exceeded my expectations. They were the finest-looking half-acre of oats I ever saw, and attracted many passers-by. The yield was 45 bushels in plump, heavy oats, with common broadcast sowing, and no cultivation or fertilizing.—Jas. F. CARL, Great Bend, Pa.

ST. JOHN, N. B., October 21st, 1895.

GENTLEMEN:—The Clydesdale Oats purchased from you in April last—three bushels—turned out admirably. They were sown early in May and yielded a large percentage to quantity sown, and at our recent Provincial Exhibition, open to the world, I received First Premium on Clydesdale Oats entered for competition and grown from your seed.—Yours very truly,

ARTHUR C. FAIRWEATHER.

Black Tartarian. The most prolific and distinct variety of Black Oat grown. Its ear is carried all on one side; it is very early, long and strong-strawed, and bears a short plump grain. **50c. peck, \$1.25 bush. (32 lbs.)**

AMERICAN OATS.

AMERICAN-GROWN CLYDESDALE.

The imported Henderson's Clydesdale Oats (offered above), of which we annually distribute such large quantities, have for years been universally admitted to be the **highest grade of White Oats in existence.**

In order to give Henderson's Clydesdale a still wider distribution and make their value universally known, and to enable us to offer them at a **price within the reach of every farmer**, we have had several thousand bushels specially grown for us in the United States during the past year. These we have thoroughly re-cleaned, and are extra choice and heavy, free from all foul seeds and light and imperfect grains. We are within the mark when we say that these oats will yield under ordinary cultivation 70 to 80 bushels per acre, and under favorable circumstances 100 bushels per acre can reasonably be expected. (See cut.) **\$1.25 bushel (32 lbs.); 10 bushel lots, \$1.15 bushel; 50 bushel lots, \$1.10 bushel; 100 bushel lots, \$1.00 bushel (32 lbs.)**

PROBESTIER. A leading white variety. It is very productive and heavy, and straw very strong. It is of Scandinavian origin, but well adapted to this climate; it ripens two or three days later than the common variety, but yields much better. **\$1.00 bushel (32 lbs.); 10 bushels and upward, 95c.; 100 bushels and upward, 90c.**

BRATTLEBORO, VT., August 14th, 1895.

GENTLEMEN:—I want to tell you of the success of the PROBESTIER OATS I got of you for seed last spring. I have about four and a half acres, and they have grown and developed finely. They were reaped the other day, and if they are well threshed, they say I shall have 300 bushels, perhaps more—which is a great yield for this latitude.

On account of the strength of the straw, they have lodged very little. I will enclose a little notice of them given in one local paper. I thought you would like to hear of my success. Yours truly,

C. S. BALESTER.

WINTER OATS.

We are now booking orders for delivery next fall for Winter Oats grown in New Jersey, which are much harder than those grown in Virginia and other Southern States, and will stand the winter as far north as New York City. They stood out strongly, are earlier and much more vigorous in growth than any spring variety. **50c. peck, \$1.25 bushel; 10 bushel lots, \$1.15 bushel.**

All cleaned by the latest and most improved machinery, free from weed seeds and small imperfect grains.

Buckwheat, Barley and Rye.

NEW JAPANESE BUCKWHEAT.

(Introduced into cultivation by us in 1887.)

It is seldom that such a sterling variety as this is placed before the agricultural community, and we would advise all who are growers of Buckwheat to give this new and distinct Japanese variety a trial in preference to any other variety, whether it be for milling, for the apiary or aviary. A glance at our illustration will show that the kernels are at least twice the size of any other variety, and of a shape peculiar and distinct from all others. The color of the kernels is also most distinct, being a rich dark shade of brown. The straw is heavier; it branches more and does not need to be sown as thickly as the other kinds. It ripens a week earlier than the Silver Hull and yields two or three times as much. It can be planted as far north as Canada. (See cut.)

Price, \$1.40 per bushel; 10 bushel lots, \$1.30 per bushel.

Early Orders are respectfully solicited to prevent disappointment, as the demand has far exceeded the supply in the past.

Truly the Japanese Buckwheat is one of the greatest improvements, in a single line of grain, of the present age. All other kinds of buckwheat can be well thrown aside; and not only the bee-keepers of our land, but farmers in general, can unite in tendering a vote of thanks to our enterprising seedsmen, Peter Henderson.—"GLEANINGS IN BEE CULTURE."

I prefer the Japanese Buckwheat to all other kinds.—F. N. HILTON, Pontiac, Mich.

I found your Japanese Buckwheat first-rate; it yielded four times more than the old kinds did in the same lot.—DAVID CEAS, Bloomville, N. Y.

The Japanese Buckwheat I had of you last year produced four times as much (by weight) as any other variety, not counting what my neighbor's chickens, who visited it daily, stole.—PHILIP WECK, Col. Co., N. Y.

Last spring I got a half-bushel of your Japanese Buckwheat and sowed it the 18th of June on not as good ground as I sowed the other kind, and from that have measured up forty-three and a half bushels of beautiful buckwheat. By weight it overruns.—J. T. ALLEN, Keeseville.

Common or American.—Yields an average of from 20 to 30 bushels per acre. Price, \$1.30 per bushel.

BARLEY.

Should be more grown than it is, especially in these days of low-priced wheat. The straw makes excellent rough feed for all kinds of stock. It is also one of the best grains with which to sow down to grass in spring.

New White Hulless Barley.—A valuable new variety, which should be sown at the rate of $1\frac{1}{2}$ bushels per acre, about the time of sowing Oats. It is two or three weeks earlier than ordinary Barley, grows about the same height, and will not shatter in the field, even when very ripe. The grain is not unlike Wheat, and weighs about 60 lbs. per bushel, instead of 48 lbs., as other Barley. For feeding to horses and hogs, when ground, it is unequaled, and is also exceedingly valuable as hay, if cut and cured just before ripening. 75c. per peck; \$2.00 per bushel of 48 lbs.; 10-bushel lots, \$1.80 per bushel.

Two-Rowed Duck-Bill.—The heads are of great length, and when maturing become slightly curved; the grains are large and plump, and brighter than any other variety of two-rowed Barley. The straw is stronger than the old popular Chevalier Barley, and has yielded nearly 70 bushels per acre. (See cut.) Price, 50c. per peck; \$1.75 per bushel.

RYE.

Rye is a valuable crop for either soiling, green fodder, straw or grain. It is largely used by farmers to seed down with in the fall, and is considered preferable to wheat for this purpose, as it protects the young grass and matures two weeks earlier in the summer than wheat.

SPRING.—A variety produced by planting Winter Rye in the spring for several years, and selecting the seed until the type was fixed. It is an excellent "catch-crop" where fall-sown grain has been winter-killed, and also for fodder and grain. \$2.00 per bushel.

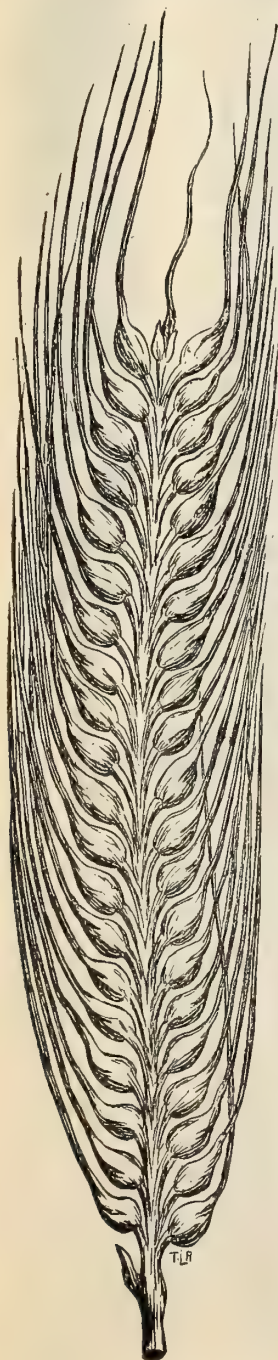
Excelsior Winter.—A new variety from Vermont, that has never failed to yield at the rate of from 40 to 50 bushels per acre. With the originator, a four-acre field yielded 52 bushels to the acre. \$1.50 per bushel; 10-bushel lots, \$1.40 per bushel.

Winter.—The variety most commonly cultivated, whether sown for grain, straw or cutting green. \$1.10 per bushel; 10-bushel lots, \$1.00 per bushel.

Thousandfold.—Said to be the most productive Rye in cultivation; the straw is tall and strong, with long heavy heads, and stands up well. Especially recommended where Rye is grown more for the straw than the grain. \$1.50 per bushel; 10-bushel lots, \$1.40 per bushel.



NEW JAPANESE BUCKWHEAT.



TWO-ROWED DUCK-BILL BARLEY.

Special prices for large quantities on application.

SPRING WHEATS.

The exceptionally dry fall last year in some sections of the country made plowing impossible, and many fields intended for Wheat remain unsown.

With the two varieties of Spring Wheat here offered, this difficulty can be overcome.

They are the best of the Spring Wheats, yield well, and the milling quality of the grain surpasses even the best of the winter varieties.

Spring Wheat is also a satisfactory crop to sow along with grass seed.

WELLMAN FIFE.

We consider this to be the best of all the Spring Wheats, being an improvement on the well-known and favorite Saskatchewan, having larger heads and grain, and the straw taller and stronger, with white chaff heads and dark amber kernels. The grain is very hard and produces the finest grade of flour, and is eagerly sought after by millers. It is enormously productive, outyielding all other Spring Wheats, and is invaluable for spring sowing where the Winter Wheat has been killed, or where it was not sown, owing to excessive drought or other causes in the fall. (*See cut.*) \$2.00 per bushel; 10-bushel lots, \$1.85 per bushel.

SASKATCHEWAN FIFE.

The favorite variety in the great Spring Wheat sections of the Northwest, where it is much esteemed by the farmer for its earliness, productiveness, vigorous growth and freedom from smut and diseases, and by the miller on account of its unsurpassed milling qualities. \$2.00 per bushel; 10-bushel lots, \$1.85 per bushel.

WINTER WHEATS.

PRICES ON APPLICATION.

RURAL NEW YORKER No. 57.

Has heavily bearded heads which are beautifully symmetrical, being pointed at the tip, broad in the middle and tapering towards the stem. The straw is unusually tall and strong and stools freely, frequently having 35 to 40 stalks from a single grain. The heads are compact, averaging three kernels to a spikelet or "breast," and ten breasts to a side. The kernels are of medium size and of an attractive color, between the so-called "red" and amber. Possessing the requisite degree of hardness for the production of the finest grade of flour, it will be much sought after by millers. The chaff is clear white, with a trace of velvet sufficient to make it difficult for the green fly to attack it, and the heads do not mildew as the full velvet chaff varieties are liable to do.

RURAL NEW YORKER No. 6.

This beardless variety is a hybrid between Rye and Armstrong Wheat, though apparently all traces of Rye have disappeared, and it now appears a handsome, beardless Wheat. It succeeds and produces heavy crops on poor, thin land, where Wheat could not be successfully or profitably grown, and it also has extreme hardness to recommend it. When first raised, some years ago, the top of the culms was downy with Rye culms. This characteristic could not be fixed, so that for this variety the culms having no down were alone selected. The gold-colored straw is very thick and strong, easily supporting the heavy grain without breaking. The large amber kernels are placed four to a breast, eight breasts to a side, with long symmetrical heads having a brown chaff. (*See cut.*) One of our growers says:

"It stools as strong as any wheat I ever saw. It had a vigorous, healthy growth all the season and stood well without lodging. It is very hardy."

EARLY GENESEE GIANT. (Half-bearded.) Is well named, for, after a thorough test, we find it *giant* in grain, *giant* in yield and *giant* in weight.

EARLY WHITE LEADER. (Bald.)—Very productive, and the whitest grained variety.

JONES' WINTER FIFE. (Bald.)—A heavy cropper and exceedingly rich in gluten, producing the highest grade of flour.

FULTZ. (Bald.)—A very popular variety, hardy and productive.

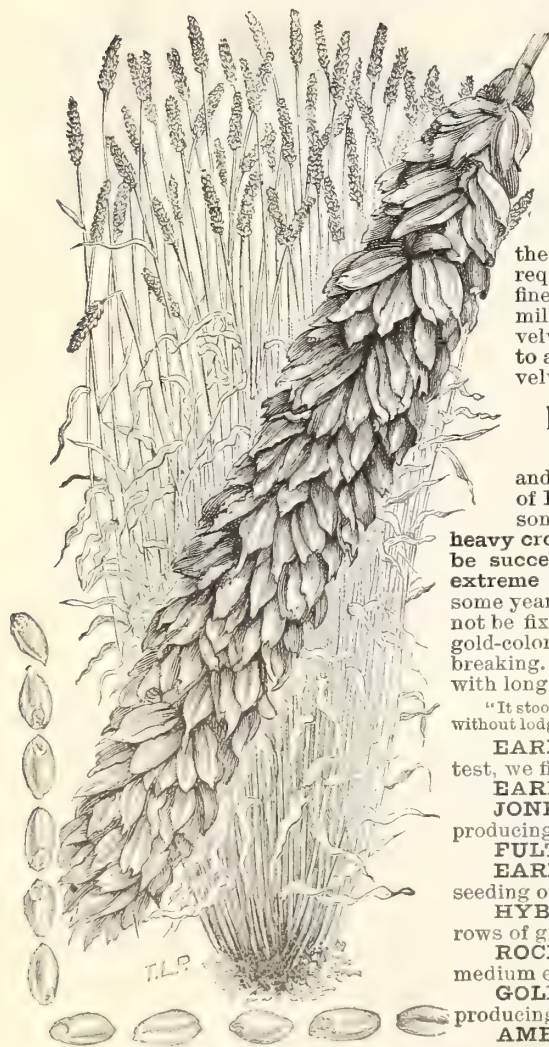
EARLY RED CLAWSON. (Bald.)—Straw very strong and bright; requires light seeding on rich soils, and is especially valuable for strong clay soils.

HYBRID MEDITERRANEAN. (Bearded.)—Produces large square heads, with four rows of grain of a handsome amber red color.

ROCHESTER RED. (Bald.)—Has a stiff straw, and does not lodge with high culture; medium early.

GOLDEN CROSS. (Bearded.)—Very compact head, early, strong and rapid growing, producing stools of mammoth size.

AMERICAN BRONZE. (Bald.)—Is of medium height and the *thickest walled straw* in cultivation, resisting severe wind-storms without lodging. A very strong grower and of spreading habit; requires light seeding on rich soil.



RURAL NEW YORKER No. 6.

WINTER WHEAT.



WELLMAN FIFE
SPRING WHEAT.

VALUABLE FORAGE PLANTS

FOR
Sowing
IN
Early
Spring
OR
Fall.



COPYRIGHT 1895 BY
PETER HENDERSON & CO.

TRUE DWARF ESSEX RAPE.

Valuable for Cattle, Sheep and Hogs.

In the United States we have millions of acres of good land that annually lie idle or run to weeds the latter part of the season, after the grain, potato and hay crops have been harvested, a large portion of which might be made to produce one of the finest feeds imaginable, and in the greatest abundance, at a time when cattle, sheep and hogs are roaming through bare pastures in search of a scanty living. Under favorable conditions it is ready for pasturing sheep or cattle within six weeks from time of sowing, and on an average one acre will carry twelve to fifteen sheep six weeks to two months. When on the Rape they should at all times have access to salt; but water is not necessary. There are several varieties of Rape, but care should be taken to procure the **Dwarf Essex**, or English as it is sometimes called, which does not seed the same season as sown, unless in some exceptional cases, as when sown too early and the young plant is touched by frost. In the Northern States it should be sown from April to end of August for fall pasturing, but as it thrives best in cool weather, it should not be sown in the Southern States until September or October for winter pasture. In the latitude of New York it should be sown in April, or in July or August. Its fattening properties are probably twice as good as those of Clover, and for sheep the feeding value of Rape excels all other plants we know of. At the Michigan Experiment Station, 128 lambs were pastured for eight weeks on 15 acres of Rape sown in July, and showed a gain of 2,890 lbs., or at the rate of 3 lbs. per lamb each week. Even so far South as Alabama it has proved a boon to the farmer. In a recent bulletin published by the Alabama Experiment Station they state: "Quality of product good for both hogs and cattle. The growth was enormous. By repeated sowings it will and did carry more hogs through our dry, hot summers than four times the amount of land planted in anything else ever grown here. I would recommend it to all Southern farmers." To secure the best results, the Rape should be sown in drills, and the plan has been successfully tried of sowing Scarlet Clover broadcast at the same time, pasturing the Rape in the fall and plowing under the Clover the following spring. Sow 6 lbs. per acre broadcast, 2 to 3 lbs. per acre in drills. Price, 12c. per lb., \$5.00 per bushel of 50 lbs., \$9.00 per 100 lbs. If by mail, add 8c. per lb.

SAND, OR WINTER VETCH. (VICIA VILLOSA.)

Though it succeeds and produces good crops on poor, sandy soils, it is much more vigorous on good land and grows to a height of 4 to 5 feet. It is perfectly hardy throughout the United States, remaining green all winter, and should be sown during August and September, mixed with Rye, which serves as a support for the plants, or in spring with Oats or Barley.

It is the earliest crop for cutting, being nearly a month earlier than Scarlet Clover, and a full crop can be taken off the land in time for planting spring crops. Being much harder than Scarlet Clover, this is the Forage Plant to sow in the Northern States where Scarlet Clover winter-kills, though it is equally valuable in the South. Every dairyman and stock-breeder in the United States should have a field of it, and if you try it once you will never be a season without it.

It is exceedingly nutritious, much more so than Clover, is eaten with relish, and may be fed with safety to all kinds of stock.

It will also prove valuable for a Hay crop in the South and dry Western regions, as it may be sown in the fall and will make a luxuriant growth during the fall and spring months, and will yield a heavy crop, which may be cut and stored before the droughts set in.

Sow one bushel per acre, with one-half bushel of Rye or Wheat. Price, 15c. per lb., \$4.50 per bushel of 60 lbs., \$7.00 per 100 lbs. If by mail, add 8c. per lb.



SAND, OR WINTER VETCH.

MISCELLANEOUS AGRICULTURAL SEEDS.

If by mail in quantities of $\frac{1}{2}$ lb. and upward, postage must be added at the rate of 8c. per lb.

PEAS FOR FODDER.



CANADA FIELD PEAS.

"Peas could be made to bring more nitrogen to the soils of this country every year than is now purchased annually by the farmers at a cost of millions of dollars."—(Year-book of the U. S. Department of Agriculture.)

For the Northern States there is no crop of greater value than Field Peas and is more neglected, which can only be attributed to a lack of knowledge as to its merits. Whether for fodder, in mixture with oats, sown at the rate of two bushels each per acre, or the Peas sown alone at the rate of three bushels per acre for plowing under, there is no crop that we can so strongly recommend for more extended culture.

Like all leguminous crops, Peas have the power of extracting nitrogen from the air, and the soil from which a crop of Peas has been harvested is richer in nitrogen than before the Peas were sown upon it, and there is no kind of live stock on the farm to which Peas and Oats in mixture cannot be fed with positive advantage.

Canada White. 50c. peck; \$1.40 bushel; 10-bushel lots, \$1.30 bushel.

Canada Blue. 50c. peck; \$1.50 bushel; 10-bushel lots, \$1.40 bushel.

The Mummy. We have much pleasure in recommending this Pea for soiling or fodder, either in mixture with oats or grown by itself. 60c. peck; \$2.00 bushel; 10-bushel lots, \$1.85 bushel.

Cow Peas. One of the most valuable of the leguminous crops, and is a soil improver which can be sown in the spring or summer and plowed under in the fall. It has no superior, especially for light soils. Its capacity for gathering nitrogen from the air is not surpassed by the clovers, and enables the farmer to dispense with buying that most costly ingredient for commercial fertilizers—nitrogen. \$2.00 bushel; 10-bushel lots, \$1.90 bushel.

FIELD BEANS.

Early Soja Beans. These beans have attracted much attention in recent years on account of their high feeding qualities, but all were too late to be of value in the Northern States. The variety here offered was originally imported from Northern Japan, and during the past four years has proved its earliness and value in the Northern States by not only producing large fodder crops, but ripening the seed as far north as Massachusetts. They are worthy of a place on every farm, either as a grain crop or fodder crop to feed green, or for the silo. The grain is the richest known vegetable substance, and when ground and fed to cattle gives a milk richer and better than cotton seed or other meal. Planted in rows $2\frac{1}{2}$ feet apart, with 6 to 8 plants to the foot of row, requiring about half a bushel per acre, they yield 15 to 20 tons per acre of fodder exceedingly rich in flesh formers, and valuable for mixing with Japanese millet (see page 16) or corn fodder, both being deficient in protein, in which the Soja Bean excels. For green feed use from time of blossoming till pods are well filled; for the silo cut as soon as most of the pods are well filled and cut into $\frac{1}{2}$ inch to $2\frac{1}{2}$ inch lengths. The best plan is to mix with two parts of corn fodder to one part of the bean fodder, with a few sunflower heads chopped up and added. The mixture can be made as the silo is being filled, and is a complete balanced ration for milch cows, without the addition of grain or other purchased feeds, and if universally used would result in a saving of hundreds of thousands of dollars to the farmers of the United States. They are soil enrichers, gathering nitrogen from the air in the same manner as clover, the roots being crowded with tubercles which give them this power. Price, 15c. lb.; \$1.50 peck; \$5.00 bushel.

Burlingame Medium. A little smaller in the grain than the ordinary medium beans, but is whiter and far handsomer in appearance. \$1.00 per peck; \$3.00 per bushel.

Improved Red Kidney. Much more prolific than the ordinary Red Kidney, and is the most popular red shelled bean. \$1.00 per peck; \$3.00 per bushel.

Boston Small Pea Bean. A desirable variety to grow, being early, hardy and prolific. \$1.00 per peck; \$3.00 per bushel.

White Marrowfat or Navy. The variety so extensively grown for sale in the dry state. \$1.00 per peck; \$3.25 per bushel.

Spring Vetches or Tares. (*Vicia sativa*.) A species of the pea, grown for stock, and sometimes mixed with oats for soiling. Sown broadcast at the rate of 2 to 3 bushels per acre. 10c. per lb.; \$2.85 per bushel of 60 lbs.; 10-bushel lots, \$2.75.

Wild Rice. (*Zizania aquatica*.) An annual which sows itself in the fall, about middle of September, lies dormant all winter, in spring commences to sprout as soon as the water gets warm, reaching the surface during the first half of June. It grows very rapidly, in one to eight feet of water, ripens late in August or early in September. It succeeds best when sown in the fall broadcast, from a boat, in two to three feet of water having a mud bottom, but it can be sown in the spring. As an attraction for wild fowl it cannot be equaled. In large ponds and lakes it purifies the water, affords plenty of food and refuge for small and large fish. Price, 25c. per lb., or by mail, 35c. per lb.; per 100 lbs., \$20.00.

Parsnip, Long Smooth. Excellent for dairy cows, possessing nutritive properties of the highest quality. 10c. per oz.; 20c. per $\frac{1}{4}$ lb.; 60c. per lb.

Artichokes, Jerusalem. A hardy perennial, forming roots like a potato, making excellent feed for stock, especially for hogs. 25c. per quart; \$1.25 peck; \$4.00 per bushel; 3 lbs. by mail, 75c.

Field Lupins. May be sown from April to July, and succeeds well on the poorest soil; and many poor lands have had their value greatly enhanced by plowing in Lupins. 25c. per lb.; \$15.00 per 100 lbs.

Sunflower, Mammoth Russian. Highly valued as an excellent and cheap food for fowls. It is the best EGG-PRODUCING FOOD known. It can be raised cheaper than corn. Plant seed in any waste piece of ground, from early spring to the middle of July. Four quarts of seed will plant one acre. 12c. per lb.; \$1.75 per bushel; \$6.50 per 100 lbs.

Cotton, Sea Island. 15c. per lb.; \$10.00 per 100 lbs.

Cotton, Upland. 15c. per lb.; \$10.00 per 100 lbs.

Flax Seed. Price, 25c. per quart, by mail 40c.; \$4.00 per bushel.

CARROTS.

Sow seed in May in drills. Rows should be 2 feet apart and plants thinned out to 5 or 6 inches apart.

Carrots are grown chiefly for horses, and they are very fond of them. On good sandy soil and with good cultivation they yield 20 tons per acre. Sow 5 lbs. per acre. The BEST SORTS for stock are:

White Vosges. The heaviest cropping field Carrot, producing

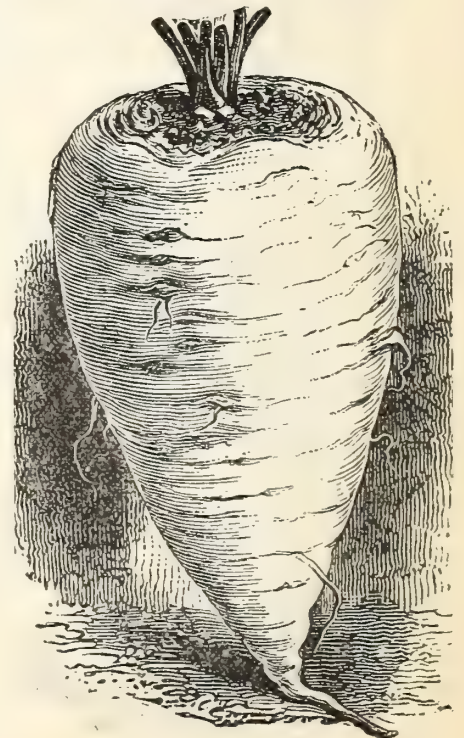
thick shapely carrots, which are easily harvested. They are used for stock feeding. (See cut.) 10c. per oz.; 30c. per $\frac{1}{4}$ lb.; 80c. per lb.

Long Orange Improved. Of large size, fair specimens averaging 12 inches in length, with a diameter of 3 inches at the top. Color orange red. 10c. per oz.; 30c. per $\frac{1}{4}$ lb.; 70c. per lb.

Danvers. Color of this valuable sort is a rich shade of orange. Under the best cultivation it has yielded from 25 to 30 tons per acre. 10c. per oz.; 30c. per $\frac{1}{4}$ lb.; 80c. per lb.; per 100 lbs., \$7 50.

Large White Belgian. Exclusively grown for stock. 10c. per oz.; 25c. per $\frac{1}{4}$ lb.; 50c. per lb.

Large Yellow Belgian. Similar to above, except in color. 10c. per oz.; 25c. per $\frac{1}{4}$ lb.; 50c. per lb.

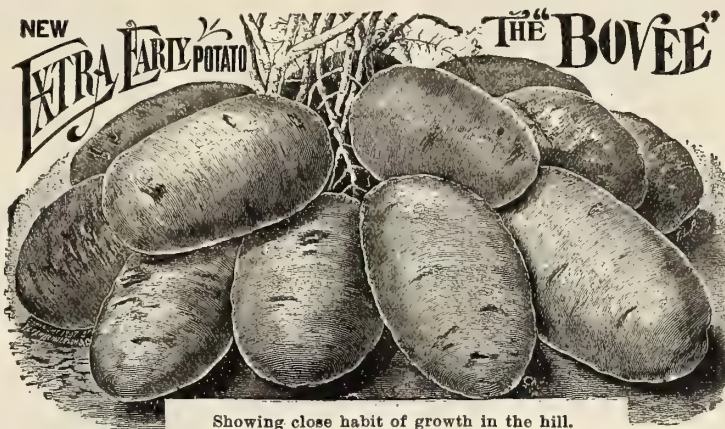


WHITE VOSGES CARROT.

THE "BOVEE" POTATO

The Earliest of all, and a great Cropper. Of Unsurpassed Quality.

Though offered for the first time this year, this Potato has had a considerable distribution in small quantities, and the reports received proclaim it to be a wonderful introduction among early Potatoes. Not only is it the earliest, but it takes a leading place among the heavy cropping varieties, an unusual thing among first earlies. It is even earlier than Early Ohio, and compares favorably with Triumph, a light cropping



variety that has only extreme earliness to recommend it, while the "Bovee" in all competitive trials has out-yielded all the early Potatoes, and in many of the tests conducted by Experiment Stations and private growers, it has outyielded even the late varieties, including such heavy-cropping kinds as Carman No. 1, Empire State, Rural New-Yorker No. 2, Irish Daisy, Brownell's Winner, Maggie Murphy, Great Divide and others.

Showing close habit of growth in the hill.

THE MOST MARVELOUS RESULTS WERE OBTAINED BY THE PENNSYLVANIA EXPERIMENT STATION,

where it ripened ten days ahead of Early Ohio† and other varieties, and in an average yield for two years was fifty bushels per acre more than any other varieties under test, most of which were late and admittedly heavy-cropping varieties, including Irish Daisy, Delaware, Maggie Murphy, Great Divide, Carman No.

1 and Carman No. 3. The vine is dwarf and stocky, and the tubers grow remarkably close, all bunched together in the hill close up to the vine. (See cut.) They size up to a marketable size more evenly than any Potato we ever saw; none too large or too small; practically the whole crop being merchantable.

THE PENNSYLVANIA EXPERIMENT STATION GIVES THE FOLLOWING REPORT:

YIELD OF VARIETIES IN 1895.					AVERAGE YIELD FOR TWO YEARS, 1895-1896.				
Order of merit.	NAME OF VARIETY.	Total yield per acre, bushels.	Date of ripening.	Per cent. of merchantable tubers.	Order of merit.	NAME OF VARIETY.	Total yield per acre, bushels.	Date of ripening, 1896.	Per cent. of merchantable tubers.
1	* The Bovee	403	Aug. 22	94	1	The Bovee	356	Aug. 14	94
2	Early Everett	350	Sept. 6	86	2	Carman No. 1	312	Sept. 2	95
3	New Queen	338	" 6	90	3	Delaware	305	" 2	94
4	Freeman	329	Aug. 30	86	4	Late Puritan	306	" 2	96
5	Pennsylvania Best	327	" 22	86	5	Rose of Erin	296	Aug. 25	97
6	Carman No. 1	322	Sept. 10	92	6	Brownell's Winner	277	Sept. 2	94
					7	Irish Daisy	255	" 2	92

† The Early Ohio stands No. 18 in order of merit in this report, with a total yield per acre of 204 bushels, or about half the yield of The Bovee.

* The Bovee was the only variety that was up on May 13th, the night of the heavy frost (31 degrees F.), and was frozen off level with the ground. By May 31st it had completely recovered and was considerably in the lead of the other varieties.

Those who have tried the "BOVEE" POTATO write:

"From our small trial, it would appear that The 'Bovee' is at least twelve days earlier than Early Ohio, but, even though no earlier, the almost perfect shape of the 'Bovee' would win the prize every time over the poorly shaped Early Ohio. It is as perfect in shape as the well-advertised Freeman and less variable. It is probably three weeks earlier, and will yield more per acre, with a smaller proportion of unmarketable tubers." THE RURAL NEW-YORKER.

Wickatunk, N. J.

"The 'Bovee' Potato was planted at the same time alongside Early Ohio, Early Acme, Quick Crop and Triumph, and, though the vines matured no earlier than Triumph and Early Ohio, the tubers sized up more quickly and could be marketed ten days ahead of any of the above. The 'Bovee' also yielded one-third to one-half more than Early Ohio and Quick Crop, and more than double the Triumph and Early Acme, growing alongside."

JOHN L. CONOVER.

Aquebogue, L. I., October 16, 1896.

"I think The 'Bovee' is the best early Potato we have both for yield, good quality and earliness. It was the best and earliest among ten varieties."

S. O. BENJAMIN.

Ohio Agricultural Experiment Station, Wooster.

"Because of the blight which has been unusually prevalent here, we have not been able to determine the relative earliness of The 'Bovee,' but there is no doubt that it is quite early.

"It seems to be quite as early as Early Ohio, and there is no doubt but it is more prolific. We regard it as very promising, and think that we have had a chance to test it quite thoroughly, as we had three plantings. It has uniformly given good results, hence we confidently recommend it. Below we give the comparative yields of several early varieties:

The 'Bovee'	bushels per acre,	503
Early Harvest	" "	449
" Northern	" "	415
" Thoroughbred	" "	378
" Ohio	" "	294
" Rose	" "	263

W. J. GREEN, Horticulturist."

Milford, Conn.

"The 'Bovee' is the best early Potato I know of. I have grown all the new kinds of Potatoes, and was one of the first to grow the Early Rose and the Early Goodrich when they came out. For eating purposes it is first-class, very dry and fine grain, and I think better than the Early Rose ever was in its best days. I believe it is at least a week earlier than any variety I know of. It turned out over 300 bushels to the acre."

C. W. BEARDSLEY.

St. Anthony Park, Minn., October 10, 1896.

"The 'Bovee' seems to be exceptionally promising."

AGRICULTURAL EXPERIMENT STATION.

Wooster, Ohio.

"Uncommonly prolific for such an early variety."

THE OHIO AGRICULTURAL EXPERIMENT STATION.

Rural Experiment Grounds, Bergen County, N. J.

"You know that one of my trials was to find out what varieties (new) are really earlier than Early Ohio. Well, I found that The 'Bovee' is at least ten days earlier. Furthermore, it is as good in shape as the Freeman and more uniformly so; the quality is fine."

E. S. CARMAN,

Editor of the Rural New-Yorker.

Amherst, Mass.

"The 'Bovee' yielded at a rate above any other in trial, and we consider it to be a very promising new variety."

THE HATCH EXPERIMENT STATION.

Dubuque, Iowa, October 12, 1896.

"The 'Bovee' is far more prolific than the Early Ohio, which was tried alongside."

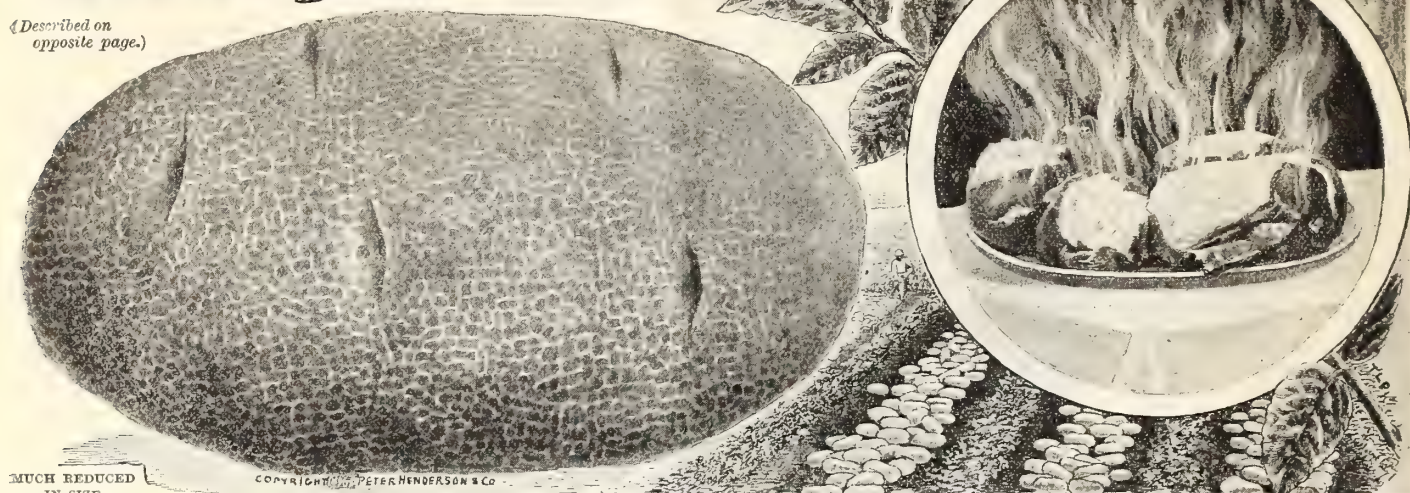
E. LINDENBERY.

PRICE, 50c. lb.; 3 lbs., \$1.00; 5 lbs., \$1.50; 10 lbs., \$2.50, POST OR EXPRESS PAID. If by express or freight, at purchaser's expense, deduct 8c. per lb.

\$2.50 peck; \$7.50 bushel; \$15.00 bbl. By express or freight at purchaser's expense.

"Uncle Sam" THE PEOPLE'S POTATO.

(Described on opposite page.)



POTATOES FOR SEED.

A CHANGE OF SEED
ALWAYS PAYS.

In drills 3 feet apart; 10 to 12 bushels to the acre. 1 peck will plant about 125 hills.

The Potato, like all robust-growing vegetables, can be grown with varying success on soils of all kinds, and in all conditions of fertility, but the soil best suited to it is a sandy loam. In all heavy soils it is more subject to disease, and the flavor also is much inferior. In breaking up good pasture land the decaying sod answers sufficiently well for the first year in lieu of manure. Manure is applied either in rows or hills, or broadcast over the hills and plowed in—the latter in most cases being preferable. If the soil is good, but little manure is required. In highly enriched soil the plants are more liable to disease than when grown in soil that is naturally good. The best fertilizers are those of a dry or absorbent nature, as plaster, lime, superphosphate of lime and bone dust. For wet soils these are particularly beneficial, as they not only promote growth but prevent disease. Plant as early in spring as the ground can be had in fair working order, in hills or ridges about three feet apart, covering in light warm soils about four inches deep, but in cold, wet situations two and one-half or three inches will be sufficient.

Our Potatoes are all specially raised for seed purposes, are "Northern Grown," and are exceptionally fine in quality this season. Prices subject to variation. We deliver all potatoes into the hands of transportation companies safely packed; after that our responsibility ceases. Purchasers must take all risks from freezing or heating. In comparing our prices on Potatoes, remember we make no charge for barrels or Cartage, but deliver F. O. B., New York, at prices quoted.

EARLY VARIETIES.

"EARLY NORTHER." Several days earlier than the **Early Rose**, and equally prolific, a most desirable sort. It is a strong, vigorous grower, and the potatoes are bunched well together in the hills. In shape it resembles the **Early Rose**; the eyes are few and shallow. Its table qualities cannot be excelled, cooking dry and floury, whether baked or boiled. Seems to do well everywhere. 50c. peck, \$1.50 bush., \$3.00 bbl.

FREEMAN. Extremely early and long-keeping; exceedingly handsome oval tubers, russet color, covered with a fine netting; flesh very white, fine-grained. 50c. peck, \$1.50 bush., \$3.00 bbl.

THE "BOVEE." (See page 4.) 1 lb. 50c., 3 lbs. \$1.00, 5 lbs. \$1.50, 10 lbs. \$2.50, postpaid. If by freight or express, deduct 8c. per lb. \$2.50 peck, \$7.50 bush., \$15.00 bbl.

QUEEN. A grand potato of recent introduction, closely resembling **Beauty of Hebron** in appearance, color, size and shape, but is much earlier and a heavier yielder. 50c. peck, \$1.50 bush., \$3.00 bbl.

ROCHESTER ROSE. Of recent years the **Early Rose** has not done well in some sections. The **Rochester Rose**, which we now offer, is a seedling of the above, and is an improvement in every respect. It will average larger in size, is not quite so early, and is a much heavier yielder. 50c. peck, \$1.50 bush., \$3.00 bbl.

SNOWFLAKE. An early variety, of superior quality. 60c. peck, \$2.00 bush., \$4.00 bbl.

HENDERSON'S EARLY PURITAN. One of the most valuable early varieties, entirely distinct from all other early sorts, the skin being nearly pure white. It cooks dry and floury and is unequalled in quality. Awarded the medal of excellence at the American Institute Fair. 50c. peck, \$1.60 bush., \$3.25 bbl.

EARLY OHIO. Tubers almost round; flesh solid; cooks dry and mealy; very early. 50c. peck, \$1.60 bush., \$3.25 bbl.

VANGUARD. A very early variety of the **Early Rose** type; flesh white and mealy. 50c. peck, \$1.50 bush., \$3.00 bbl.

EARLY ROSE. The leading variety for earliness, quality and productiveness. 50c. peck, \$1.50 bush., \$3.00 bbl.

BEAUTY OF HEBRON. One of the best early sorts; productive and of excellent flavor; a good keeper; pure white skin and flesh. 50c. peck, \$1.50 bush., \$3.00 bbl.

CLARKE'S No. 1. Earlier than the **Early Rose** and very productive. Cooks mealy. 50c. peck, \$1.50 bush., \$3.00 bbl.

MEDIUM EARLY VARIETIES.

NEW IDEAL. Yields a very much heavier crop than any of the earlier; in fact, it outyielded several of the late potatoes. It is a handsome potato, having a pink russet skin; it is one of the best cooking or baking potatoes, the flavor being excellent; the vines are large, stocky and healthy; its keeping qualities are of the best. 60c. peck, \$2.00 bush., \$4.00 bbl.

RURAL NEW-YORKER No. 2. Large and smooth variety, of excellent quality; white skin and flesh, with few and shallow eyes. 50c. peck, \$1.50 bush., \$3.00 bbl.

CARMAN NUMBER 3. A new seedling raised by Mr. Carman. It is of perfect form, even in dry seasons, almost every potato being of uniform size and shape, averaging a pound each in weight. It has but few eyes and they are very shallow. The skin and flesh are extremely white, no hollow or dark parts, and its cooking qualities are exceptionally fine; a remarkably handsome potato and enormously prolific. In many respects this potato resembles the well-known and popular **Rural New-Yorker No. 2**, but is destined to supersede that well-known variety. 50c. peck, \$1.75 bush., \$3.50 bbl.

CARMAN NUMBER 1. Introduced three years ago and created a sensation on account of its very large size, uniform shape, handsome appearance and immense yield. Its cooking qualities are peerless. 50c. peck, \$1.75 bush., \$3.50 bbl.

"SIR WALTER RALEIGH." (See opposite page.) 1 lb. 50c., 3 lbs. \$1.00, 5 lbs. \$1.50, 10 lbs. \$2.50, postpaid. If by freight or express, deduct 8c. per lb. \$2.50 peck, \$7.50 bush., \$15.00 bbl.

DON'T FAIL to examine our **SPECIAL OFFER**, on next page, of the three grand new Potatoes, **THE "BOVEE," "SIR WALTER RALEIGH"** and **"UNCLE SAM."**

The ... People's Potato, "Uncle Sam."

"**UNCLE SAM**" had outyielded all between ninety and one hundred per cent., or nearly double the crop per acre of these well-known varieties. Its cropping qualities are phenomenal, and we believe it to be the heaviest yielding Potato known, not even excepting several varieties worthless in every other respect than their heavy cropping qualities—varieties which produce coarse, waxy and unpalatable tubers.

But, aside from its productiveness, which is largely attributable to the uniform size of the Potatoes, nearly all sizing up alike, none too large and few too small, its crowning merit is its superb cooking qualities, which will ultimately place "**UNCLE SAM**" on every table where quality in Potatoes is appreciated.

It is a medium late variety, ripening along with Rural New-Yorker No. 2, and has most luxuriant foliage, completely shading the ground.

The tubers are oval with pure white skin, with very shallow eyes near the surface, and are so handsome in appearance and perfect in form that they will always bring an enhanced price upon the market. Price, 1 lb., 35c.; 3 lbs., 80c., postpaid; by freight or express, at purchaser's expense, \$1.25 pk.; \$4.00 bush.; \$8.00 bbl.

LATE PURITAN. In the **LATE Puritan** we have a potato which is identical with the **Early Puritan** in appearance, color and quality, but far more productive. 50c. peck, \$1.50 bush., \$3.00 bbl.

PRIDE OF THE WEST. A flattish-round, red variety; very large; eyes deep but few. The quality is unequalled; medium late; strong grower. 50c. peck, \$1.50 bush., \$3.00 bbl.

BILL NYE. A heavy cropper. It is very smooth and handsome, eyes unusually shallow. 50c. peck, \$1.50 bush., \$3.00 bbl.

RESTAURANT. If you wish to raise a big crop of large, handsome potatoes, this is the sort to plant. It is of large size, is an enormous yielder, and, for a main crop variety, cannot be excelled. 50c. peck, \$1.60 bush., \$3.25 bbl.

A GRAND NEW MAIN CROP POTATO, "SIR WALTER RALEIGH." Mr. Carman's Best.

The only seedling of the well-known Rural New-Yorker No. 2 that is better than its parent.

Though offered this year for the first time, we have grown it for three years, and are convinced that it is the best of Mr. Carman's introductions, and Mr. Carman has raised some of the best and most popular varieties, notably the great pairs, Rural Blush and Rural New-Yorker No. 2, and the Carman No. 1 and No. 3. In most respects it closely resembles Rural New-Yorker No. 2, but is more uniform and yields practically no small tubers, every one being marketable. It is from four to six days later than the Rural New-Yorker; the color of the skin is the same, but the flesh is whiter and of better quality; in fact, it is the whitest-fleshed and finest-grained Potato, excelling even the Snowflake. It is unquestionably the best of its type, and will soon supersede all others of this class.

At the Rural Grounds it proved the best and heaviest cropper of forty-nine varieties, and on our own trial farm and on the farms of three potato experts in New Jersey, New York and Connecticut, it proved the most remarkable of many varieties grown.

We have named it "**Sir Walter Raleigh**," because of the great exhibition of Potatoes being held in Ireland this year, the tricentennial year of the introduction of the so-called Irish Potato into Great Britain by Sir Walter Raleigh, who, it is claimed, got the tubers in Virginia. Combining as it does three centuries of improvement, and representing the highest type of Potato known to-day, we believe it to be a fitting tribute to the original introducer of the Potato into commerce, to have his name attached to the best production of Mr. Carman, who has in recent years done so much for the improvement of the Potato. (See cut.)

PRICE, 50c. lb.; 3 lbs. for \$1.00, 5 lbs. for \$1.50, 10 lbs. for \$2.50, postpaid. If by express or freight, deduct 8c. per lb.



Those who have tried our "**SIR WALTER RALEIGH POTATO**" write:

Wickatunk, Monmouth County, N. J.
"I am of a decided opinion that '**Sir Walter Raleigh**' will be the coming Potato for main crop. It has certainly far exceeded my expectations. I have grown all of Mr. Carman's Potatoes, and believe that in '**Sir Walter Raleigh**' Mr. Carman has excelled all his previous efforts. The quality is equal

to Rural Blush and Snowflake, and the flavor much finer than either. It is a heavy cropper and produces no small Potatoes."

J. L. CONOVER.

Milford, Conn.

"The '**Sir Walter Raleigh**' is a great yielder;

all large Potatoes, no small ones; vines grow strong and upright."

C. W. BEARDSLEY.

Aquebogue, Long Island, N. Y.
" '**Sir Walter Raleigh**' is an immense yielder, of fine quality, and very few small ones."

S. O. BENJAMIN.

PRICE, 50c. lb.; 3 lbs., \$1.00; 5 lbs., \$1.50; 10 lbs., \$2.50, POST OR EXPRESS PAID. If by express or freight, at purchaser's expense, deduct 8c. per lb.
\$2.50 peck, \$7.50 bushel, \$15.00 bbl., by express or freight, at purchaser's expense.

Special Offer.

1 lb. each of the three grand New Potatoes, The "**Bovee**," "**Sir Walter Raleigh**" and "**Uncle Sam**," delivered free for \$1.00; 3 lbs. each for \$2.25. If by express or freight, at purchaser's expense, deduct 8c. per lb. ALSO, by express or freight, at purchaser's expense, 1 peck each The "**Bovee**," "**Sir Walter Raleigh**" and "**Uncle Sam**," \$5.00; 1 bbl., containing 1 bushel each "**Sir Walter Raleigh**" and The "**Bovee**," and filled up with about $\frac{1}{2}$ bushel "**Uncle Sam**," \$15.00; 1 bbl. each "**Sir Walter Raleigh**," The "**Bovee**" and "**Uncle Sam**," \$30.00.

Root Crops for Farm Stock.

MANGELS.

Mangels are the most important of all root crops for feeding, and may be grown in any part of the American continent on fairly good farm land; all that is necessary is good cultivation.

The best soil for Mangels is loose friable loam and deep plowing. If expedient, follow the plow with a subsoil plow, and the crop will more than repay the extra trouble. The ground should be well enriched, and the seed sown in May in drills 24 inches apart in light soils, and 30 inches apart in strong, rich land; thin out the plants with a hoe to 9 inches apart in the former and 12 inches apart in the latter. 6 to 8 lbs. of seed are used per acre if sown with a drill, or double that quantity by hand. Cultivate with a horse hoe.

If by mail in quantities of ½ lb. and over, add for postage at the rate of 8 cents per lb.

I raised over 100 tons of your Colossal Long Red Mangel on 2 acres. In many cases three weighed over 100 lbs., the best crop I ever saw on an average, either in this country or in England, and I have farmed in both countries. — JOHN HODGSON, Crystal Lake Farm, Paterson, N. J., 28th January, 1893.

LONG OR TANKARD-SHAPED.

HENDERSON'S COLOSSAL LONG RED.—The roots are smooth and regular, of the largest size and blood-red color. The quality is exceedingly nutritious, and in all respects this variety is most distinct and valuable. (*See cut.*) 35 cts. lb.; in lots of 10 lbs., 30 cts. per lb.

HENDERSON'S GIANT INTERMEDIATE.—This is a variety between the Golden Tankard and Yellow Globe. It is larger than the Tankard, not such a rich golden color, but a heavier cropper. 35 cts. lb.; in lots of 10 lbs., 30 cts. lb.

GOLDEN TANKARD.—The flesh is bright golden yellow, and in this respect differs from most other varieties, which cut white. The Golden Tankard is an exceedingly popular variety in Great Britain, where it is considered particularly valuable on account of its nutritious and milk-producing qualities. Sheep have a preference for this sort over other Mangels; it is said that they will pick out every piece of Golden Tankard before touching others. It yields under the best cultivation 75 tons per acre. (*See cut.*) 40 cts. per lb.; in lots of 10 lbs., 35 cts., lb.

LONG RED.—This variety is more generally grown for agricultural purposes than any other, producing roots of large size and excellent quality. 30 cts. lb.; in lots of 10 lbs., 25 cts. lb.

LONG YELLOW.—Differs from the Long Red only in color. 45 cts. lb.; in lots of 10 lbs., 40 cts. lb.

GLOBE-SHAPED

HENDERSON'S CHAMPION YELLOW GLOBE.—Smooth, globe-shaped roots, of large size and excellent quality, are the distinctive features of this variety. 35 cts. lb.; in lots of 10 lbs., 30 cts. lb.

YELLOW GLOBE.—Roots of large size and globular form; very productive; keeps better than the Long Red, and is better adapted for growing in shallow soils. 35 cts. lb.; in lots of 10 lbs., 30 cts. lb.

YELLOW OVOID.—In shape this sort is intermediate between the Long and Globe varieties. A very nutritious and valuable variety. 35 cts. lb.; in lots of 10 lbs., 30 cts. lb.

HENDERSON'S RED GLOBE.—A variety similar to the Yellow Globe in shape and size; and different only in color. 45 cts. lb.; in lots of 10 lbs., 40 cts. lb.

SUGAR BEET.

Sow at the rate of 12 to 15 lbs. per acre.

Average yield, 20 to 25 tons per acre.

LANE'S IMPERIAL.—An improved variety of the French Sugar Beet, obtained by careful selection in this country, and recommended as being hardier and more productive. 40 cts. lb.; in lots of 10 lbs., 35 cts. lb.; 100 lbs., 30 cts. lb.

WHITE.—Attains a large size, and is extensively grown for feeding; largely cultivated in France for the manufacture of sugar. 35 cts. lb.; in lots of 10 lbs., 30 cts. lb.; 100 lbs., 25 cts. lb.

VILMORIN'S IMPROVED WHITE.—A greatly improved variety of the preceding, obtained by over 20 years' continued and systematic selection. The proportion of sugar in the roots, under ordinary circumstances, amounts to 18 to 20 per cent., while in other varieties the usual average is 12 to 15 per cent. Has yielded 30 tons and over per acre, and is unequaled for feeding cows and young stock. 45 cts. lb.; in lots of 10 lbs., 40 cts. lb.; 100 lbs., 35 cts. lb.



GOLDEN TANKARD MANGEL.



HENDERSON'S COLOSSAL LONG RED MANGEL.

Ruta Bagas, Russian or Swedish Turnips.



LONG ISLAND IMPROVED
PURPLE-TOP RUTA BAGA.

These come next to Mangels in importance for stock-feeding purposes, and can be sown much later. They grow very rapidly, and yield from twenty-five to thirty-five tons per acre, in good, rich, deep soil, with proper cultivation. The Ruta Bagas proper should be sown in this latitude from May 25th to June 25th; while the smaller-growing turnips can be sown from July 1st to the middle of August. If sown at the time mentioned, they should be planted in rows, 30 inches apart, and the plants thinned with a hoe to 12 or 14 inches apart; but if either sorts are sown a month later, they can be grown one-third closer, both in the rows and between the plants. Store for winter according to article in our book "How the Farm Pays."

Sow 2 to 3 lbs. per acre.

LONG ISLAND IMPROVED PURPLE-TOP RUTA BAGA.

This is undoubtedly the finest variety of purple-top Ruta Baga, and is purely of American origin, having been originated by one of our Long Island growers. It is twice the size of ordinary American stocks, and although size is usually got at the expense of quality, the quality of this variety for domestic purposes is superior to any that we have tested. It is perfectly hardy. In a fair test on several Long Island farms, alongside some of the best European and American varieties, it produced almost twice the weight per acre of any other variety. (See cut.) 5 cts. per pkt.; 10 cts. per oz.; 25 cts. per $\frac{1}{4}$ lb.; 70 cts. per lb.

SKIRVING'S PURPLE-TOP.—A first-rate variety for stock or table; grows to a large size; flesh firm, solid and sweet, and a good keeper. 5 cts. pkt.; 10 cts. oz.; 20 cts. $\frac{1}{4}$ lb.; 55 cts. lb.; 10 lbs., \$5.00.

SHAMROCK.—One of the finest purple-top varieties in cultivation; forms a handsome bulb, with small top and very few leaves; an excellent keeper and good for stock or table use. 5 cts. pkt.; 10 cts. oz.; 20 cts. $\frac{1}{4}$ lb.; 55 cts. lb.; 10 lbs., \$5.00.

IMPROVED AMERICAN (Purple-Top).—An old leading variety; very hardy and productive; flesh yellow, solid, sweet and fine-flavored; equally good for stock or table use; one of the principal varieties raised by market gardeners, and was one of the best of all Swede Turnips until we introduced the "Long Island Improved." 5 cts. per pkt.; 10 cts. per oz.; 20 cts. $\frac{1}{4}$ lb.; 55 cts. lb.; 10 lbs., \$5.00.

LAING'S IMPROVED.—One of the earliest of the Ruta Bagas; forms a handsome bulb of good quality; keeps well; good for stock or table use; 5 cts. pkt.; 10 cts. oz.; 20 cts. $\frac{1}{4}$ lb.; 50 cts. lb.; 10 lbs., \$4.50.

LARGE WHITE FRENCH.—A superior variety for table or stock; flesh firm, white and solid; attains a large size, and has a very rich and sweet flavor; a very popular variety. 5 cts. pkt.; 10 cts. oz.; 25 cts. $\frac{1}{4}$ lb.; 70 cts. lb.; 10 lbs., \$6.50.

LARGE YELLOW FRENCH.—Similar to the white in every respect, except as to color of the flesh. Price, 5 cts. per pkt.; 10 cts. oz.; 20 cts. $\frac{1}{4}$ lb.; 55 cts. lb.; 10 lbs., \$5.00.

TURNIPS

SPECIALLY ADAPTED FOR

STOCK FEEDING.

WHITE FLESHED.

PURPLE-TOP WHITE GLOBE.

One of the best early varieties grown; fine, thick globe-shape, of large size, rapid growth, and of extra fine quality; heavy cropper; in other respects similar to the Red Top Strap Leaf. A handsome-looking bulb, has become exceedingly popular, and is rapidly taking the lead of all other varieties of early turnip. It keeps well, and is unequaled for stock-feeding, table use or marketing. (See cut.) 5 cts. pkt.;

10 cts. oz.; 20 cts. $\frac{1}{4}$ lb.; 60 cts. lb.; 10 lbs., \$5.50.

POMERANIAN WHITE GLOBE.

—Valuable alike for the table and for stock. 5 cts. pkt.; 10 cts. oz.; 20 cts. $\frac{1}{4}$ lb.; 60 cts. lb.

LONG WHITE or COW HORN.

—Matures very quickly; root shaped like a carrot, about half of which is formed above ground; flesh white, fine-grained and sweet, and of excellent quality. 5 cts. pkt.; 10 cts. oz.; 20 cts. $\frac{1}{4}$ lb.; 60 cts. lb.; 10 lbs., \$5.50.

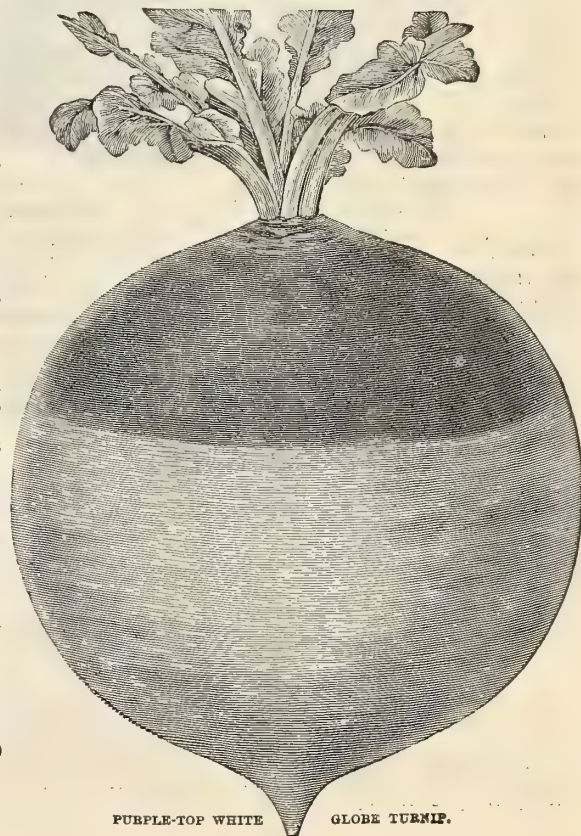
YELLOW FLESHED.

YELLOW GLOBE.—One of the best varieties for general crop; flesh very firm and sweet, and keeps well until late in the spring; grows to a large size, and is excellent both for stock or table use. 5 cts. pkt.; 10 cts. oz.; 20 cts. $\frac{1}{4}$ lb.; 70 cts. lb.; 10 lbs., \$5.50.

GOLDEN BALL (Robertson's).—Rapid grower, excellent flavor, globe-shaped, and of a beautiful, bright yellow color, a good keeper, and has

no superior for either stock or table use. 5 cts. pkt.; 10 cts. oz.; 25 cts. $\frac{1}{4}$ lb.; 75 cts. lb.; 10 lbs., \$7.00.

YELLOW ABERDEEN.—Very hardy and productive, good keeper, globe-shaped; color, pale yellow, with purple top. Very firm in texture, and closely resembling the Ruta Bagas in good-keeping qualities; good for table or stock. 5 cts. pkt.; 10 cts. oz.; 20 cts. $\frac{1}{4}$ lb.; 60 cts. lb.; 10 lbs., \$5.50.



PURPLE-TOP WHITE

GLOBE TURNIP.

Remember the above prices on Turnip Seed are postpaid.



THE "HENDERSON" LAWN GRASS SEED

IS THE BEST FOR OUR AMERICAN CLIMATE.
With it you can make

Lawns, Grass Plots,

Cricket Grounds, . .

Tennis Courts, Etc., .

AS SOFT AS VELVET AND AS GREEN AS EMERALD
ALL SUMMER LONG.

THE "HENDERSON" LAWN GRASS SEED is the best Lawn Grass Seed for our American climate. It will form a close thick turf in a few weeks' time, with no tendency to stool or grow in clumps. It roots deeply and withstands severe droughts without turning brown, maintaining its beautiful deep green color throughout the season.

We have made the formation of permanent lawns a study for years, and The Finest Lawns in this Country To-day were obtained by using The "Henderson" Lawn Grass Seed, which is composed of various grasses that grow and flourish during different months of the year, so that a rich, deep green, velvety lawn is constantly maintained, rivaling the famous lawns of Old England.

The beautiful lawns at the World's Fair in Chicago we produced in six weeks' time with the "Henderson" Lawn Grass Seed. Not one of the charming features of the Exposition was so universally admired as our "setting of emerald velvet," which, withstanding the long-continued drought of the summer, retained its verdure throughout the entire season. Besides being the only lawn grass seed granted a medal, we exhibited the separate grasses used in the mixture, and received Seven Awards for superior quality and purity of samples.

THE "HENDERSON" LAWN GRASS SEED is, relatively speaking, the cheapest seed offered, because, while the lawn grass mixtures of other seedsmen will not average over 14 lbs. to the bushel, this weighs from 20 to 21 lbs. per measured bushel.

If people only knew how comparatively easy it is to make a lawn with the "Henderson" Lawn Grass Seed, the days of using sod, with all the attendant expense, would soon be over.

THE QUANTITY REQUIRED.

(We furnish it in large or small quantities to suit the pretentious lawn or the modest doorway plot.)

The quantity required for making new lawns is 5 bushels per acre, or for renovating old lawns, 1 to 2 bushels. For a plot 15 x 20, or 300 square feet, 1 quart is required for new, or 1 pint for renovating old lawns.

PRICES, per quart, 25c.; peck, \$1.50; bushel (20 lbs.), \$5.00.

(If by mail, add at the rate of 5c. per quart for postage.)

THE
ONLY
LAWNS at
THE
WORLD'S
FAIR
Granted A MEDAL
were those sown with

The "Henderson" Lawn Grass Seed.

And besides,

We received 7 Awards of Merit for the individual grasses we use in the mixture.

Office of Director-General,
World's Columbian Exposition,
Chicago, Ill., Dec. 1st, 1893.

Your lawns at the World's Columbian Exposition were as nearly perfect as lawns could be made. The sod was dense, containing no extraneous weeds or grass, and the color from every point viewed was uniform in appearance. They were in excellent condition during the entire period of the World's Fair.

J. M. SAMUELS,
Chief Dep't of Horticulture.

Office of Director of Works,
World's Columbian Exposition,
Chicago, Ill., Oct. 25th, 1893.

The "Henderson" Lawn Grass Seed was used on the World's Fair grounds, and it affords me pleasure to say that the quality of the seed was first-class in every respect, forming lawns rapidly, which stood the droughts of the past summer, making a thick sod, and is more durable than any other we have used.

R. ULRICH,
Supt. Landscape Dep't.

The cut at the top of this page is the reproduction of a "snap-shot" by our Special Artist at the International Cricket Match between the famous Australian Cricketers and the New Jersey Athletic Club on the beautiful grounds of the latter at Bayonne, N. J., 23d and 24th Sept., 1896.

If ever there was an instance of forming a turf under adverse circumstances, it is here, for the greater part of the Bayonne oval is a veritable sand-hill. Yet a good turf has been formed AND MAINTAINED THESE EIGHT OR NINE YEARS on this Cricket ground, by the use of the "Henderson" Lawn Grass, so much so that the Australian Captain pronounced it the best Cricket pitch that his team had played on during their whole American tour, thus proving that the grasses used had the "wear and tear" qualities necessary for a good Cricket ground.

HENDERSON'S LAWN GRASS MIXTURES

FOR SPECIAL SITUATIONS.

**Terraces and Embankments, Shady Situations,
Golf Links, Hot, Dry Sections.**

THE Special Mixtures here offered have been prepared with a view to overcoming difficulties that have hitherto existed in getting grass to grow on steep slopes, in the shade, etc., where the grasses ordinarily used would not succeed.

The grasses we use in these mixtures are peculiarly adapted for the purpose, and will thrive in the situations and under the conditions for which they have been prepared, but the more effectually to overcome the difficulties, the ground should be thoroughly prepared and a rapid growth of the grasses encouraged by a liberal use of fertilizer or *well-rotted* stable manure. Ground that has been densely shaded by trees is frequently "sour," and if the drainage is defective it is apt to be covered with moss. In such cases an application of lime, land plaster or wood ashes is an excellent corrective and sweetener, but the moss should be first removed by the use of a sharp rake.

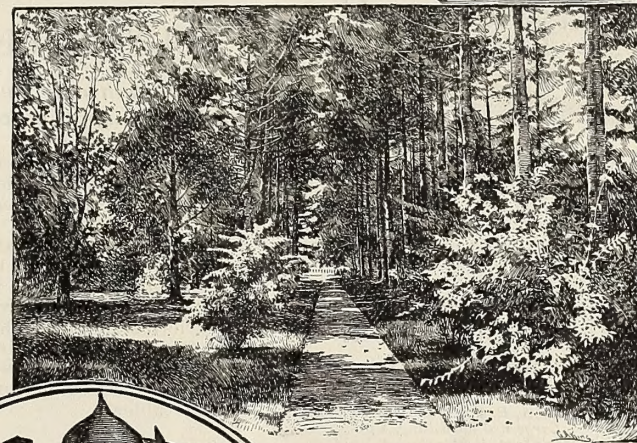


HENDERSON'S "SHADY NOOK" LAWN GRASS.

On nearly all lawns there are unsightly bare spots under the shade of trees, which have baffled all efforts to get into grass, but with this mixture there need be no further difficulty.

It is a combination of fine, dwarf-growing, evergreen varieties, which in their wild or natural state are to be found growing in the woods or other sheltered and shaded spots.

Price, 35c. qt., \$2.00 pk., \$7.00 bush.
(If by mail, add at the rate of 5c. per qt. for postage.)



HENDERSON'S "SUNNY SOUTH" LAWN GRASS.

Is especially prepared for the South or for very dry sections, and contains all the best grasses that are by nature adapted for hot, dry situations. In the Southern States Bermuda grass is frequently used, but it remains green only in the summer months, turning brown in winter, while most of the Northern grasses perish in

the heats and droughts of summer.

By using this mixture, and with some care and attention, an all-the-year-round lawn can be maintained.

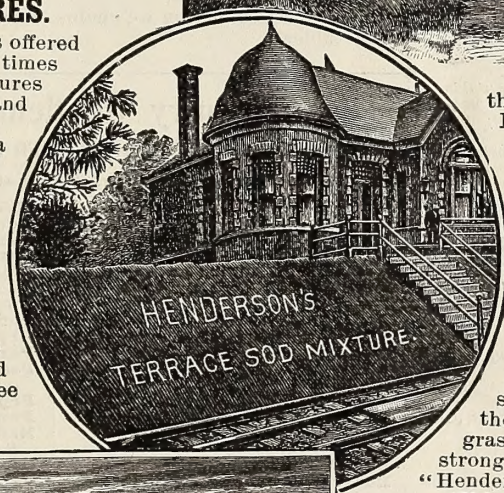
Price, 35c. qt., \$2.00 pk., \$7.00 bush.
(If by mail, add at the rate of 5c. per qt. for postage.)

SPECIAL MIXTURES.

Besides the Lawn Mixtures offered on this page, we shall at all times be pleased to make up mixtures for special requirements and situations.

We have made grasses a special study, and invite correspondence on the subject, and are always glad to advise, so far as lies in our power, how to secure the desired results and the best methods of overcoming weeds and coarse grasses in lawns.

Our pamphlet, "How to MAKE A LAWN," is enclosed in every package, or sent free to applicants.



HENDERSON'S "TERRACE SOD" LAWN GRASS.

A special mixture of grasses best suited for sowing on terraces, railroad embankments and side hills—grasses that produce strong, spreading roots, thus preventing heavy rains from washing them out; that will withstand drought and exposure, thrive on shallow soils, and at the same time produce a rich, velvety green turf throughout the season. There need be no fear of introducing coarse grasses into your lawn by sowing this mixture, for, though strong-rooted, the grasses are equally as fine as those used in the "Henderson" mixture. Price, 35c. qt., \$2.00 pk., \$7.00 bush.
(If by mail, add at the rate of 5c. per qt. for postage.)

HENDERSON'S "GOLF LINK" GRASS SEED.

The bracing game of Golf has now become so deservedly popular here that many inquiries have reached us lately for a mixture of grasses that will produce a sward equal to those of the "GOLF LINKS" of Scotland.

Last summer one of our representatives visited some of these Scotch Links, and after minutely examining them found that the close-cut sod of the Scotch "putting greens" can be duplicated here by using certain grasses adapted by nature to grow on light soils and sandy situations.

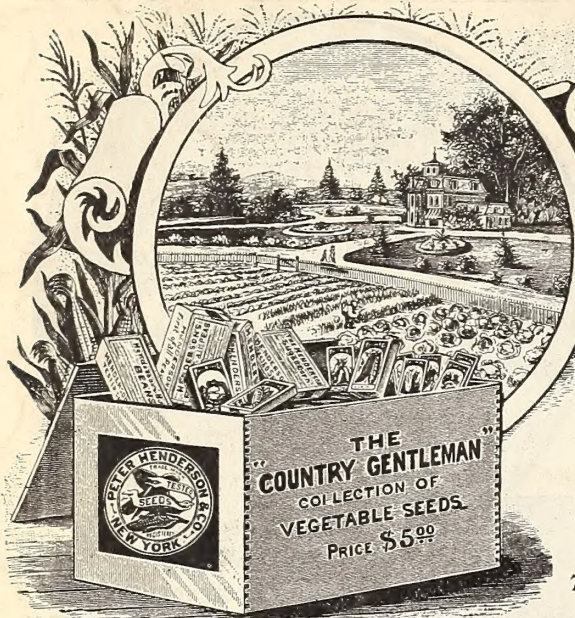
While the outlying portions of the "Links" can be seeded with less expensive grasses, the "putting greens" for about twenty yards around the "holes" must be sown with the very finest grasses.

For Putting Greens we can supply a special mixture of grasses.
Price, 30c. qt., \$1.75 pk., \$6.00 bush.

(If by mail, add at the rate of 5c. per qt. for postage.)

For the Outlying Grounds or Links proper we can supply a suitable mixture of grasses.
Price, \$2.50 bush.; 20 bushels and upward, \$2.25 bush.





FOR THE CITY GARDEN,
 SUBURBAN GARDEN,
 AND COUNTRY GENTLEMAN'S HOME.

Saving of
 35 per cent.

These Collections contain only true and tried kinds selected with a view to giving a continuous supply of fresh vegetables throughout the season.

THE frequent request from customers for an assortment of garden seeds for a garden of small, medium, or large dimensions, that will save them the trouble of selecting, has induced us to offer the collections detailed below. Our long experience in selecting for thousands of customers enables us to make up these collections so accurately of the best standard sorts as to be suited to the majority of people who do not wish novelties.

The seeds we put in are of our very best standard sorts, and the quantities are proportioned to meet the requirements of such gardens as the titles indicate. As we make up these collections in quantity before the busy season opens we are thereby enabled to sell them for fully 35 per cent. less than they would cost if the articles were selected separately; so if two or three varieties included should be of no use to you, you will still be getting the remainder for less than catalogue rates. We can allow no alterations.

With each collection we enclose a pamphlet on the cultivation of vegetables.

The "City Garden" Collection.

PRICE, \$1.00, OR FREE BY MAIL FOR \$1.25.

Contains 20 Distinct Varieties in All, viz.:

- | | |
|---|--|
| <p>Beans (none of which require staking), Dwarf, string green pod, $\frac{1}{2}$ pt.; Dwarf, string, yellow wax pod, $\frac{1}{2}$ pt.; Bush Limas, 1 pkt.
 Beet, round red, 1 pkt.
 Cabbage, Early Wakefield, 1 pkt.
 Carrot, Early Half-long scarlet, 1 pkt.
 Corn, Early Sugar, $\frac{1}{2}$ pt.
 Cucumber, for slicing, etc., 1 pkt.
 Egg Plant, 1 pkt.
 Lettuce, Best Summer Heading, 1 pkt.</p> | <p>Onion, Early White for slicing, 1 pkt.; Large Red for boiling, 1 pkt.
 Parsley, Double Curled, 1 pkt.
 Peas (none of which require staking), Earliest Dwarf, $\frac{1}{2}$ pt.; Dwarf, Medium Early, for succession, $\frac{1}{2}$ pt.; Dwarf Late, $\frac{1}{2}$ pt.
 Radish, Early Round Red, 1 pkt.
 Squash, White Scalloped Bush, 1 pkt.
 Tomato, Early Smooth Scarlet, 1 pkt.
 Turnip, Round White Table, 1 pkt.</p> |
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The "Suburban Garden" Collection.

PRICE, \$2.50. WEIGHT PACKED FOR SHIPMENT, 12 lbs.

Carriage to be paid by Customer. Contains 37 Distinct Varieties in All, viz.:

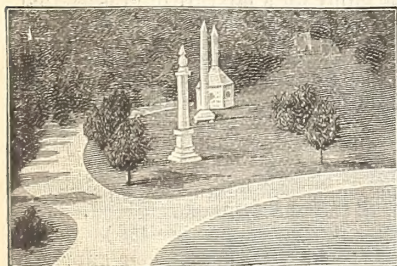
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| <p>Beans, Dwarf, string green pod, 1 qt.; Dwarf, string yellow or wax pod, 1 qt.; Dwarf Limas, $\frac{1}{2}$ pt.; Climbing Snap, 1 pt.
 Beet, Round Red Table, 1 pkt.
 Cabbage, Early and Late, each 1 pkt.
 Carrot, Early Long Scarlet, 1 pkt.
 Celery, Self-blanching, 1 pkt.
 Corn, Sugar, Early and Late, each $\frac{1}{2}$ pt.
 Cucumber, for slicing, 1 pkt.; for pickles, 1 pkt.
 Egg Plant, 1 pkt.
 Endive, or White Chicory, for salads, 1 pkt.
 Leek, for soups, 1 pkt.
 Lettuce, Early Heading, 1 pkt.; Best for Summer, 1 pkt.</p> | <p>Melons, Musk, Sweet green-fleshed, 1 pkt.; Water, Early, 1 pkt.
 Onions, Early White for Soup, 1 pkt.; Large Red for Boiling, 1 pkt.
 Parsley, d'ble curled for garnishing, 1 pkt.
 Parsnip, Long White, 1 pkt.
 Peas, Extra Early, Medium and Late, each 1 qt.
 Pepper, Large for Mangoes, 1 pkt.
 Pumpkin, best for pies, 1 pkt.
 Radish, Round Red, 1 pkt.; Round White, 1 pkt.
 Salsify, White, 1 pkt.
 Spinach, Best Summer, 1 pkt.
 Squash, for Summer and Fall, each 1 pkt.
 Tomato, Large Smooth Scarlet, 1 pkt.
 Turnip, Round White Table, 1 pkt.</p> |
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The "Country Gentleman's" Collection.

PRICE, \$5.00. WEIGHT PACKED FOR SHIPMENT, 28 lbs.

Carriage to be paid by Customer. Contains 60 Distinct Varieties in All, viz.:

- | | |
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| <p>Beans, Dwarf, snap green pod, 2 qts.; Dwarf, snap, wax or yellow pod, 1 qt.; Dwarf Limas, $\frac{1}{2}$ pt.; Large Limas, 1 pt.; Pole, Snap, 1 pt.
 Beets, Early and Late Round Red, ea. 1 oz.
 Cabbage, Extra Early, Medium and Late, each 1 pkt.
 Carrot, Early Scarlet, 1 oz.
 Cauliflower, Snowball, 1 pkt.
 Celery, $\frac{1}{2}$ oz.
 Corn, Sugar, Extra Early, 1 pt.; Sugar, Medium Early, 1 qt.; Sugar, Main Crop, 1 qt.
 Corn Salad, 1 pkt.
 Cucumber, for slicing, 1 oz.; for pickles, 1 oz.
 Egg Plant, 1 pkt.
 Endive, or White Chicory, for salads, 1 pkt.
 Kale, Dwarf curled, 1 pkt.
 Kohl Rabi, white, 1 pkt.
 Leek, for soups, 1 pkt.
 Lettuce, Early Head, 1 pkt.; Best Summer Head, 1 pkt.</p> | <p>Melons, Musk, Early, 1 pkt.; Main Crop, 1 oz.; Water, Early, 1 pkt.
 Nasturtium, for pickles, 1 pkt.
 Okra, for soups, 1 pkt.
 Onions, Small White for slicing, 1 pkt.; Large White for boiling, 1 oz.; Large Red, for Winter, 1 oz.
 Parsley, double curled, for garnishing, 1 pkt.
 Parsnip, Long White, 1 oz.
 Peas, Extra Early, Medium and Late, each 2 qts.
 Pepper, Large for Mangoes, 1 pkt.
 Pumpkin, for pies, 1 pkt.
 Radish, Early Round Red, 1 oz.; Early Round White, 1 oz.
 Sage, 1 pkt.
 Salsify, White, 1 pkt.
 Spinach, 1 oz.
 Squash, Summer, 1 oz.; for Winter, 1 oz.
 Thyme, 1 pkt.
 Tomato, Extra Early Scarlet, 1 pkt.; Large Scarlet, 1 pkt.
 Turnip, Extra Early, White Flesh, 1 oz.; Yellow Flesh, 1 oz.</p> |
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THE "HENDERSON"

LAWN

GRASS

SEED.

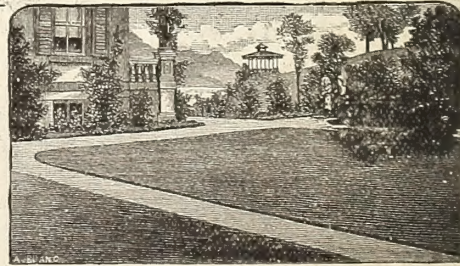
In large or small quantities, to suit the pretentious lawn or the modest door-yard plot. With it you can renovate old or make new

LAWNS AND GRASS PLOTS

as soft as velvet and as green as emerald all summer long. It is matchless for

CEMETERIES AND PARKS,

forming lawns rapidly which stand the droughts of summer, making a thick and durable sod.



IF PEOPLE ONLY KNEW how comparatively easy it is to make a lawn with THE HENDERSON LAWN GRASS SEED, the days of using sod would soon be over. See pages 30 and 31.

